

Demographic study (Females vs. Males, Professionals vs. Laymen, Young vs. Old) - MATLAB t-test results

Attribute	Parameter	Column# in results
Time	% playing time	2
	% idle time	4
	% start time	46
	% concurrent	3
	total (minutes)	1
Notes/ Keys	# of presses	10
	% used	11
	presses per key	29
	play per key (sec)	12
	% black presses	34
	% white presses	35
Intensity [†]	average	9
	lowest (minimum)	7
	highest (maximum)	8
	most used	5
Octave	average	21
	lowest (minimum)	19
	highest (maximum)	20
	most used	17
Cluster of notes	# of instances	24
	max pressed [‡]	28
	most pressed [§]	25
	% most played	26
Transitions	% diminuendo	41
	% crescendo	42
	% same intensity	43
	% accelerando	44
	% ritardando	45
	% white to black	37
	% black to white	38
	% black to black	39
Pitch classes	% white to white	40
	% playing time: C,C#,D,D#,E,F,F#, G,G#,A,A#,B	48-59

[†] 1-pppp : 2-ppp ; 3-pp ; 4-p ; 5-mp ; 6-mf ; 7-f ; 8-ff ; 9-fff ; 10-ffff
[‡] configuration of maximum number of keys pressed ; [§] most pressed configuration ;

^{||} relative playing time of the most pressed configuration;

<https://www.mathworks.com/help/stats/ttest2.html>

Variable	Definition
<i>Parameters matrix representation</i>	
F	Females mean
M	Males mean
L	Laymen mean
P	Professional mean
Y	Young mean
O	Old mean
d	Cohen's D size effect
Test the alternative hypothesis that the population means are not equal.	
h	Hypothesis test result, returned as 1 or 0
p	p-value of the test
ci	Confidence interval for the <i>difference</i> in population means of x and y
stats.tstat	Value of the test statistic
stats.df	Degrees of freedom of the test
stats.sd	Unpooled estimates of the population SD
Test the alternative hypothesis that the population mean of x is greater than the population mean of y.	
hr	Hypothesis test result, returned as 1 or 0
pr	p-value of the test
cir	Confidence interval for the <i>difference</i> in population means of x and y
statsr.tstat	Value of the test statistic
statsr.df	Degrees of freedom of the test
statsr.sd	Unpooled estimates of the population SD
Test the alternative hypothesis that the population mean of x is less than the population mean of y.	
hl	Hypothesis test result, returned as 1 or 0
pl	p-value of the test
cil	Confidence interval for the <i>difference</i> in population means of x and y
statsl.tstat	Value of the test statistic
statsl.df	Degrees of freedom of the test
statsl.sd	Unpooled estimates of the population SD

Females vs. Males

>> F

F =

Columns 1 through 10

0.7590 69.7429 257.0637 30.2571 6.2311 40.3637 2.4292 8.1321 5.9245 117.7217

Columns 11 through 20

26.8698 0.4167 336.3042 58.7547 3.4953 18.8439 3.5377 56.6241 2.2972 5.1745

Columns 21 through 30

3.6368 4.0613 26.2401 218.5047 2.4387 56.6632 1.0000 5.5613 4.6783 15.5075

Columns 31 through 40

18.9892 34.6943 81.0127 16.5165 83.4844 0.2340 9.3382 9.1736 7.1783 74.3151

Columns 41 through 50

46.5090 49.7179 3.7759 11.0726 88.9151 17.9722 63.7099 15.3123 2.3882 11.5458

Columns 51 through 60

2.8679 12.8811 11.4660 3.4915 13.7288 2.8217 10.3887 3.1297 9.9731 NaN

>> M

M =

Columns 1 through 10

0.9542 67.3893 259.8360 32.6107 6.4907 39.2084 2.2290 8.4439 6.1028 206.3178

Columns 11 through 20

30.8762 0.3740 336.6682 58.6028 3.5140 18.5252 3.5421 52.9986 2.1636 5.4252

Columns 21 through 30

3.5981 4.2430 26.6009 381.1869 2.2710 55.1678 1.0000 5.9439 7.1720 18.8322

Columns 31 through 40

18.4804 39.1780 81.5210 15.5322 84.4682 0.3280 8.7780 8.5799 6.7542 75.8916

Columns 41 through 50

46.9294 49.5977 3.4724 11.0640 88.9150 18.1808 58.4701 15.1215 2.6136 11.9500

Columns 51 through 60

2.9065 13.0383 11.5014 2.8150 12.2463 2.8953 12.0486 2.8477 10.0103 NaN

>> h

h =

Columns 1 through 18

0 0 0 0 0 0 1 0 1 1 0 0 0 0 0 0 1

Columns 19 through 36

0 0 0 0 0 1 0 0 NaN 0 1 0 0 1 0 0 0 0 0

Columns 37 through 54

0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Columns 55 through 60

0 0 1 0 0 NaN

>> p

p =

Columns 1 through 10

0.1336 0.2573 0.8774 0.2573 0.1052 0.3274 0.1753 0.0106 0.1687 0.0335

Columns 11 through 20

0.0311 0.2307 0.9942 0.9265 0.8934 0.7730 0.9744 0.0408 0.2933 0.0628

Columns 21 through 30

0.7341 0.5605 0.7542 0.0423 0.4422 0.5471 NaN 0.3695 0.0051 0.1241

Columns 31 through 40

0.7861 0.0303 0.7863 0.6080 0.6082 0.2035 0.5853 0.5582 0.7371 0.5718

Columns 41 through 50

0.4559 0.8415 0.4069 0.9931 0.9999 0.8977 0.0762 0.8774 0.6043 0.6191

Columns 51 through 60

0.9448 0.8665 0.9687 0.1931 0.0832 0.8813 0.0377 0.5820 0.9623 NaN

>> ci

ci =

Columns 1 through 10

-0.4506 -1.7245 -38.0858 -6.4318 -0.5737 -1.1606 -0.0897 -0.5508 -0.4324 -170.2451
0.0601 6.4318 32.5412 1.7245 0.0547 3.4711 0.4902 -0.0729 0.0759 -6.9470

Columns 11 through 20

-7.6463 -0.0273 -97.9204 -3.0818 -0.2934 -1.8511 -0.2685 0.1528 -0.1160 -0.5149
-0.3664 0.1128 97.1924 3.3856 0.2560 2.4884 0.2598 7.0982 0.3832 0.0135

Columns 21 through 30

-0.1849 -0.7947 -2.6244 -319.6356 -0.2610 -3.3826 NaN -1.2198 -4.2309 -7.5654
0.2623 0.4313 1.9027 -5.7288 0.5963 6.3735 NaN 0.4546 -0.7564 0.9160

Columns 31 through 40

-3.1748 -8.5398 -4.1918 -2.7848 -4.7528 -0.2394 -1.4563 -1.3975 -2.0574 -7.0525
4.1923 -0.4276 3.1752 4.7533 2.7852 0.0512 2.5766 2.5849 2.9056 3.8995

Columns 41 through 50

-1.5280 -1.0609 -0.4152 -1.9404 -1.9553 -3.3965 -0.5543 -2.2381 -1.0794 -2.0014
0.6870 1.3015 1.0222 1.9576 1.9556 2.9791 11.0339 2.6196 0.6288 1.1929

Columns 51 through 60

-1.1344 -1.9935 -1.8059 -0.3437 -0.1953 -1.0420 -3.2250 -0.7242 -1.5820 NaN
1.0571 1.6792 1.7352 1.6968 3.1604 0.8948 -0.0948 1.2883 1.5076 NaN

>> stats.tstat

ans =

Columns 1 through 10

-1.5031 1.1344 -0.1543 -1.1344 -1.6236 0.9805 1.3576 -2.5658 -1.3788 -2.1352

Columns 11 through 20

-2.1636 1.2004 -0.0073 0.0923 -0.1341 0.2887 -0.0321 2.0520 1.0523 -1.8655

Columns 21 through 30

0.3399 -0.5825 -0.3134 -2.0396 0.7694 0.6026 NaN -0.8983 -2.8260 -1.5411

Columns 31 through 40

0.2715 -2.1729 -0.2712 0.5133 -0.5131 -1.2749 0.5460 0.5861 0.3360 -0.5659

Columns 41 through 50

-0.7463 0.2001 0.8303 0.0087 0.0001 -0.1287 1.7776 0.1544 -0.5186 -0.4975

Columns 51 through 60

-0.0693 -0.1683 -0.0393 1.3036 1.7370 -0.1494 -2.0847 0.5510 -0.0473 NaN

>> stats.df

ans =

Columns 1 through 10

417.7926 423.9781 422.9375 423.9781 422.5963 422.5755 419.2995 423.9988 422.7089 304.2942

Columns 11 through 20

412.6516 403.8743 385.2267 423.1365 422.5309 396.7257 423.7724 423.9777 420.8204 419.7811

Columns 21 through 30

423.7515 423.6452 414.7243 304.7293 341.7154 423.9703 NaN 423.9130 269.9686 415.3424

Columns 31 through 40

420.8359 419.9029 420.8390 421.6248 421.6266 270.5086 419.8334 419.6895 408.1686 422.6593

Columns 41 through 50

423.5113 422.8458 389.3274 423.7112 423.6242 423.3816 422.5603 399.4475 423.7061 421.7840

Columns 51 through 60

423.4015 421.7565 421.8504 401.1543 407.3811 423.6396 421.6604 423.5592 412.7178 NaN

>> stats.sd

ans =

1.0e+03 *

Columns 1 through 10

0.0014	0.0214	0.1891	0.0214	0.0017	0.0124	0.0016	0.0012	0.0014	0.2592
0.0013	0.0214	0.1816	0.0214	0.0016	0.0119	0.0014	0.0013	0.0013	0.5483

Columns 11 through 20

0.0174	0.0004	0.5853	0.0165	0.0014	0.0097	0.0014	0.0182	0.0014	0.0014
0.0207	0.0003	0.4256	0.0174	0.0015	0.0129	0.0014	0.0183	0.0013	0.0013

Columns 21 through 30

0.0012	0.0032	0.0109	0.4993	0.0027	0.0256	0	0.0043	0.0045	0.0205
0.0012	0.0033	0.0128	1.0535	0.0016	0.0256	0	0.0044	0.0121	0.0239

Columns 31 through 40

0.0201	0.0201	0.0201	0.0204	0.0204	0.0004	0.0111	0.0109	0.0142	0.0294
0.0186	0.0224	0.0186	0.0191	0.0191	0.0010	0.0101	0.0100	0.0117	0.0281

Columns 41 through 50

0.0059	0.0060	0.0043	0.0101	0.0101	0.0170	0.0312	0.0110	0.0045	0.0080
0.0057	0.0064	0.0032	0.0104	0.0105	0.0165	0.0297	0.0143	0.0044	0.0087

Columns 51 through 60

0.0056	0.0099	0.0096	0.0059	0.0096	0.0050	0.0079	0.0053	0.0074	NaN
0.0059	0.0093	0.0090	0.0047	0.0079	0.0052	0.0086	0.0052	0.0088	NaN

>>

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>> hr
```

```
hr =
```

Columns 1 through 18

```
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1
```

Columns 19 through 36

```
0 0 0 0 0 0 0 NaN 0 0 0 0 0 0 0 0 0 0 0
```

Columns 37 through 54

```
0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0
```

Columns 55 through 60

```
1 0 0 0 0 NaN
```

```
>> pr
```

```
pr =
```

Columns 1 through 10

```
0.9332 0.1286 0.5613 0.8714 0.9474 0.1637 0.0877 0.9947 0.9157 0.9832
```

Columns 11 through 20

```
0.9845 0.1154 0.5029 0.4632 0.5533 0.3865 0.5128 0.0204 0.1466 0.9686
```

Columns 21 through 30

```
0.3671 0.7197 0.6229 0.9789 0.2211 0.2736 NaN 0.8152 0.9975 0.9380
```

Columns 31 through 40

```
0.3931 0.9848 0.6068 0.3040 0.6959 0.8983 0.2927 0.2791 0.3685 0.7141
```

Columns 41 through 50

```
0.7720 0.4207 0.2034 0.4965 0.4999 0.5512 0.0381 0.4387 0.6978 0.6904
```

Columns 51 through 60

```
0.5276 0.5668 0.5156 0.0966 0.0416 0.5594 0.9812 0.2910 0.5188 NaN
```

```
>> cir
```

cir =

Columns 1 through 10

-0.4094	-1.0665	-32.3884	-5.7739	-0.5230	-0.7869	-0.0429	-0.5122	-0.3914	-157.0540
Inf	Inf	Inf	Inf	Inf	Inf	Inf	Inf	Inf	Inf

Columns 11 through 20

-7.0590	-0.0160	-82.1754	-2.5601	-0.2491	-1.5010	-0.2259	0.7130	-0.0757	-0.4722
Inf	Inf	Inf	Inf	Inf	Inf	Inf	Inf	Inf	Inf

Columns 21 through 30

-0.1489	-0.6958	-2.2592	-294.2785	-0.1918	-2.5956	NaN	-1.0847	-3.9501	-6.8812
Inf	Inf	Inf	Inf	Inf	Inf	Inf	Inf	Inf	Inf

Columns 31 through 40

-2.5805	-7.8853	-3.5975	-2.1767	-4.1447	-0.2159	-1.1310	-1.0762	-1.6570	-6.1690
Inf									

Columns 41 through 50

-1.3493	-0.8704	-0.2992	-1.6259	-1.6398	-2.8821	0.3805	-1.8461	-0.9416	-1.7437
Inf	Inf	Inf	Inf	Inf	Inf	Inf	Inf	Inf	Inf

Columns 51 through 60

-0.9576	-1.6973	-1.5202	-0.1791	0.0754	-0.8858	-2.9725	-0.5618	-1.3327	NaN
Inf	Inf	Inf	Inf	Inf	Inf	Inf	Inf	Inf	Inf

>> statsr.tstat

ans =

Columns 1 through 10

-1.5031	1.1344	-0.1543	-1.1344	-1.6236	0.9805	1.3576	-2.5658	-1.3788	-2.1352
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Columns 11 through 20

-2.1636	1.2004	-0.0073	0.0923	-0.1341	0.2887	-0.0321	2.0520	1.0523	-1.8655
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Columns 21 through 30

0.3399	-0.5825	-0.3134	-2.0396	0.7694	0.6026	NaN	-0.8983	-2.8260	-1.5411
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Columns 31 through 40

0.2715 -2.1729 -0.2712 0.5133 -0.5131 -1.2749 0.5460 0.5861 0.3360 -0.5659

Columns 41 through 50

-0.7463 0.2001 0.8303 0.0087 0.0001 -0.1287 1.7776 0.1544 -0.5186 -0.4975

Columns 51 through 60

-0.0693 -0.1683 -0.0393 1.3036 1.7370 -0.1494 -2.0847 0.5510 -0.0473 NaN

>> statsr.df

ans =

Columns 1 through 10

417.7926 423.9781 422.9375 423.9781 422.5963 422.5755 419.2995 423.9988 422.7089 304.2942

Columns 11 through 20

412.6516 403.8743 385.2267 423.1365 422.5309 396.7257 423.7724 423.9777 420.8204 419.7811

Columns 21 through 30

423.7515 423.6452 414.7243 304.7293 341.7154 423.9703 NaN 423.9130 269.9686 415.3424

Columns 31 through 40

420.8359 419.9029 420.8390 421.6248 421.6266 270.5086 419.8334 419.6895 408.1686 422.6593

Columns 41 through 50

423.5113 422.8458 389.3274 423.7112 423.6242 423.3816 422.5603 399.4475 423.7061 421.7840

Columns 51 through 60

423.4015 421.7565 421.8504 401.1543 407.3811 423.6396 421.6604 423.5592 412.7178 NaN

>> statsr.sd

ans =

1.0e+03 *

Columns 1 through 10

0.0014 0.0214 0.1891 0.0214 0.0017 0.0124 0.0016 0.0012 0.0014 0.2592

0.0013 0.0214 0.1816 0.0214 0.0016 0.0119 0.0014 0.0013 0.0013 0.5483

Columns 11 through 20

0.0174	0.0004	0.5853	0.0165	0.0014	0.0097	0.0014	0.0182	0.0014	0.0014
0.0207	0.0003	0.4256	0.0174	0.0015	0.0129	0.0014	0.0183	0.0013	0.0013

Columns 21 through 30

0.0012	0.0032	0.0109	0.4993	0.0027	0.0256	0	0.0043	0.0045	0.0205
0.0012	0.0033	0.0128	1.0535	0.0016	0.0256	0	0.0044	0.0121	0.0239

Columns 31 through 40

0.0201	0.0201	0.0201	0.0204	0.0204	0.0004	0.0111	0.0109	0.0142	0.0294
0.0186	0.0224	0.0186	0.0191	0.0191	0.0010	0.0101	0.0100	0.0117	0.0281

Columns 41 through 50

0.0059	0.0060	0.0043	0.0101	0.0101	0.0170	0.0312	0.0110	0.0045	0.0080
0.0057	0.0064	0.0032	0.0104	0.0105	0.0165	0.0297	0.0143	0.0044	0.0087

Columns 51 through 60

0.0056	0.0099	0.0096	0.0059	0.0096	0.0050	0.0079	0.0053	0.0074	NaN
0.0059	0.0093	0.0090	0.0047	0.0079	0.0052	0.0086	0.0052	0.0088	NaN

>> hl

hl =

Columns 1 through 18

0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0
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Columns 19 through 36

0	1	0	0	0	1	0	0	NaN	0	1	0	0	1	0	0	0	0
---	---	---	---	---	---	---	---	-----	---	---	---	---	---	---	---	---	---

Columns 37 through 54

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Columns 55 through 60

0	0	1	0	0	NaN
---	---	---	---	---	-----

>> pl

pl =

Columns 1 through 10

0.0668 0.8714 0.4387 0.1286 0.0526 0.8363 0.9123 0.0053 0.0843 0.0168

Columns 11 through 20

0.0155 0.8846 0.4971 0.5368 0.4467 0.6135 0.4872 0.9796 0.8534 0.0314

Columns 21 through 30

0.6329 0.2803 0.3771 0.0211 0.7789 0.7264 NaN 0.1848 0.0025 0.0620

Columns 31 through 40

0.6069 0.0152 0.3932 0.6960 0.3041 0.1017 0.7073 0.7209 0.6315 0.2859

Columns 41 through 50

0.2280 0.5793 0.7966 0.5035 0.5001 0.4488 0.9619 0.5613 0.3022 0.3096

Columns 51 through 60

0.4724 0.4332 0.4844 0.9034 0.9584 0.4406 0.0188 0.7090 0.4812 NaN

>> cil

cil =

Columns 1 through 10

-Inf
0.0189 5.7739 26.8438 1.0665 0.0040 3.0975 0.4435 -0.1115 0.0349 -20.1381

Columns 11 through 20

-Inf
-0.9537 0.1015 81.4474 2.8639 0.2116 2.1383 0.2172 6.5379 0.3429 -0.0292

Columns 21 through 30

-Inf
0.2262 0.3324 1.5375 -31.0859 0.5271 5.5865 NaN 0.3195 -1.0372 0.2318

Columns 31 through 40

-Inf
3.5980 -1.0820 2.5809 4.1452 2.1771 0.0277 2.2513 2.2636 2.5052 3.0160

Columns 41 through 50

-Inf -Inf -Inf -Inf -Inf -Inf -Inf -Inf -Inf -Inf

0.5083 1.1109 0.9062 1.6432 1.6401 2.4648 10.0991 2.2277 0.4910 0.9353

Columns 51 through 60

-Inf	-Inf	-Inf	-Inf	-Inf						
0.8803	1.3829	1.4495	1.5322	2.8896	0.7385	-0.3473	1.1259	1.2584	NaN	

>> stats1.tstat

ans =

Columns 1 through 10

-1.5031 1.1344 -0.1543 -1.1344 -1.6236 0.9805 1.3576 -2.5658 -1.3788 -2.1352

Columns 11 through 20

-2.1636 1.2004 -0.0073 0.0923 -0.1341 0.2887 -0.0321 2.0520 1.0523 -1.8655

Columns 21 through 30

0.3399 -0.5825 -0.3134 -2.0396 0.7694 0.6026 NaN -0.8983 -2.8260 -1.5411

Columns 31 through 40

0.2715 -2.1729 -0.2712 0.5133 -0.5131 -1.2749 0.5460 0.5861 0.3360 -0.5659

Columns 41 through 50

-0.7463 0.2001 0.8303 0.0087 0.0001 -0.1287 1.7776 0.1544 -0.5186 -0.4975

Columns 51 through 60

-0.0693 -0.1683 -0.0393 1.3036 1.7370 -0.1494 -2.0847 0.5510 -0.0473 NaN

>> stats1.df

ans =

Columns 1 through 10

417.7926 423.9781 422.9375 423.9781 422.5963 422.5755 419.2995 423.9988 422.7089 304.2942

Columns 11 through 20

412.6516 403.8743 385.2267 423.1365 422.5309 396.7257 423.7724 423.9777 420.8204 419.7811

Columns 21 through 30

423.7515 423.6452 414.7243 304.7293 341.7154 423.9703 NaN 423.9130 269.9686 415.3424

Columns 31 through 40

420.8359 419.9029 420.8390 421.6248 421.6266 270.5086 419.8334 419.6895 408.1686 422.6593

Columns 41 through 50

423.5113 422.8458 389.3274 423.7112 423.6242 423.3816 422.5603 399.4475 423.7061 421.7840

Columns 51 through 60

423.4015 421.7565 421.8504 401.1543 407.3811 423.6396 421.6604 423.5592 412.7178 NaN

>> stats1.sd

ans =

1.0e+03 *

Columns 1 through 10

0.0014	0.0214	0.1891	0.0214	0.0017	0.0124	0.0016	0.0012	0.0014	0.2592
0.0013	0.0214	0.1816	0.0214	0.0016	0.0119	0.0014	0.0013	0.0013	0.5483

Columns 11 through 20

0.0174	0.0004	0.5853	0.0165	0.0014	0.0097	0.0014	0.0182	0.0014	0.0014
0.0207	0.0003	0.4256	0.0174	0.0015	0.0129	0.0014	0.0183	0.0013	0.0013

Columns 21 through 30

0.0012	0.0032	0.0109	0.4993	0.0027	0.0256	0	0.0043	0.0045	0.0205
0.0012	0.0033	0.0128	1.0535	0.0016	0.0256	0	0.0044	0.0121	0.0239

Columns 31 through 40

0.0201	0.0201	0.0201	0.0204	0.0204	0.0004	0.0111	0.0109	0.0142	0.0294
0.0186	0.0224	0.0186	0.0191	0.0191	0.0010	0.0101	0.0100	0.0117	0.0281

Columns 41 through 50

0.0059	0.0060	0.0043	0.0101	0.0101	0.0170	0.0312	0.0110	0.0045	0.0080
0.0057	0.0064	0.0032	0.0104	0.0105	0.0165	0.0297	0.0143	0.0044	0.0087

Columns 51 through 60

0.0056	0.0099	0.0096	0.0059	0.0096	0.0050	0.0079	0.0053	0.0074	Nan
0.0059	0.0093	0.0090	0.0047	0.0079	0.0052	0.0086	0.0052	0.0088	Nan

>>

>> d

d =

Columns 1 through 10

-0.1457 0.1099 -0.0150 -0.1099 -0.1574 0.0950 0.1316 -0.2486 -0.1336 -0.2063

Columns 11 through 20

-0.2095 0.1164 -0.0007 0.0089 -0.0130 0.0279 -0.0031 0.1988 0.1020 -0.1808

Columns 21 through 30

0.0329 -0.0564 -0.0303 -0.1971 0.0747 0.0584 NaN -0.0870 -0.2729 -0.1492

Columns 31 through 40

0.0263 -0.2104 -0.0263 0.0498 -0.0497 -0.1231 0.0529 0.0568 0.0326 -0.0548

Columns 41 through 50

-0.0723 0.0194 0.0806 0.0008 0.0000 -0.0125 0.1723 0.0149 -0.0503 -0.0482

Columns 51 through 59

-0.0067 -0.0163 -0.0038 0.1265 0.1685 -0.0145 -0.2019 0.0534 -0.0046

>>

Laymen vs. Professionals

>> L

L =

Columns 1 through 10

0.4662 62.2880 210.9745 37.7120 6.1806 42.0468 2.5926 7.9028 5.8981 82.3796

Columns 11 through 20

22.7611 0.3870 339.1255 60.6204 3.6481 20.7620 3.6204 59.9884 2.4259 5.2824

Columns 21 through 30

3.7315 4.3148 25.6940 141.2130 1.8981 64.4861 1.0000 4.6528 4.0426 7.8736

Columns 31 through 40

9.4148 33.0125 90.5875 7.4634 92.5375 0.1676 4.0000 3.8796 3.4639 88.6616

Columns 41 through 50

45.4542 50.9514 3.5968 7.8120 92.1667 20.3880 56.0171 14.9875 1.1190 12.6255

Columns 51 through 60

1.3838 14.8458 13.2407 1.5361 13.1042 1.1421 12.4602 1.2366 12.3167 NaN

>> P

P =

Columns 1 through 10

1.2524 75.2671 304.4671 24.7329 6.5190 37.5205 2.0667 8.6524 6.1048 241.9571

Columns 11 through 20

34.8090 0.4034 319.9724 56.4238 3.3381 16.5186 3.4476 49.3629 2.0381 5.3048

Columns 21 through 30

3.4905 3.9810 27.1548 459.6714 2.8143 47.1857 1.0000 6.8095 7.8476 26.2410

Columns 31 through 40

28.0552 40.7181 71.9457 24.5543 75.4462 0.4071 14.3681 14.1162 10.1857 61.3348

Columns 41 through 50

48.0024 48.3805 3.6181 14.3500 85.6381 15.7590 66.7319 15.6200 3.8186 10.8590

Columns 51 through 60

4.4905 10.9571 9.7000 4.6629 12.9052 4.6000 10.0100 4.8200 7.5467 NaN

>> h

h =

Columns 1 through 18

1 1 1 1 1 1 1 1 0 1 1 0 0 1 1 1 0 1

Columns 19 through 36

1 0 1 0 0 1 1 1 NaN 1 1 1 1 1 1 1 1 1 1

Columns 37 through 54

1 1 1 1 1 1 0 1 1 1 1 0 1 1 1 1 1 1 1

Columns 55 through 60

0 1 1 1 1 NaN

>> p

p =

Columns 1 through 10

0.0000 0.0000 0.0000 0.0000 0.0332 0.0001 0.0003 0.0000 0.1103 0.0002

Columns 11 through 20

0.0000 0.6446 0.6898 0.0101 0.0254 0.0001 0.1952 0.0000 0.0020 0.8677

Columns 21 through 30

0.0327 0.2861 0.2057 0.0001 0.0000 0.0000 NaN 0.0000 0.0000 0.0000

Columns 31 through 40

0.0000 0.0002 0.0000 0.0000 0.0000 0.0011 0.0000 0.0000 0.0000 0.0000

Columns 41 through 50

0.0000 0.0000 0.9533 0.0000 0.0000 0.0040 0.0002 0.6093 0.0000 0.0297

Columns 51 through 60

0.0000 0.0000 0.0001 0.0000 0.8163 0.0000 0.0021 0.0000 0.0000 NaN

>> ci

ci =

Columns 1 through 10

-1.0343 -16.8441 -127.4908 9.1142 -0.6499 2.2572 0.2401 -0.9780 -0.4604 -241.3875
-0.5381 -9.1142 -59.4944 16.8441 -0.0270 6.7954 0.8117 -0.5212 0.0472 -77.7676

Columns 11 through 20

-15.4950 -0.0862 -75.0995 1.0049 0.0385 2.1155 -0.0890 7.2955 0.1426 -0.2860
-8.6009 0.0534 113.4056 7.3882 0.5816 6.3714 0.4345 13.9556 0.6330 0.2413

Columns 21 through 30

0.0199 -0.2805 -3.7261 -475.4959 -1.3349 12.7183 NaN -2.9635 -5.5476 -22.1837
0.4621 0.9483 0.8046 -161.4211 -0.4973 21.8825 NaN -1.3500 -2.0625 -14.5510

Columns 31 through 40

-21.8078 -11.6722 15.4745 -20.4260 13.7563 -0.3822 -12.1353 -11.9806 -8.9754 22.5239
-15.4731 -3.7390 21.8091 -13.7557 20.4263 -0.0969 -8.6009 -8.4926 -4.4683 32.1297

Columns 41 through 50

-3.6225 1.4256 -0.7367 -8.3801 4.6794 1.4848 -16.4018 -3.0632 -3.4806 0.1743
-1.4740 3.7162 0.6941 -4.6958 8.3777 7.7731 -5.0278 1.7982 -1.9186 3.3585

Columns 51 through 60

-4.1700 2.0825 1.8021 -4.0995 -1.4829 -4.3733 0.8904 -4.5471 3.2924 NaN
-2.0434 5.6949 5.2794 -2.1540 1.8807 -2.5424 4.0099 -2.6197 6.2476 NaN

>> stats.tstat

ans =

Columns 1 through 10

-6.2410 -6.6009 -5.4054 6.6009 -2.1362 3.9210 3.6173 -6.4497 -1.6000 -3.8408

Columns 11 through 20

-6.8706 -0.4617 0.3994 2.5861 2.2451 3.9201 1.2980 6.2731 3.1107 -0.1667

Columns 21 through 30

2.1439 1.0682 -1.2676 -3.9934 -4.3002 7.4215 NaN -5.2569 -4.3006 -9.4636

Columns 31 through 40

-11.5696 -3.8184 11.5707 -10.0764 10.0770 -3.3037 -11.5362 -11.5413 -5.8660 11.1872

Columns 41 through 50

-4.6652 4.4149 -0.0586 -6.9763 6.9398 2.8940 -3.7034 -0.5115 -6.8018 2.1809

Columns 51 through 60

-5.7475 4.2324 4.0030 -6.3217 0.2325 -7.4328 3.0877 -7.3184 6.3467 NaN

>> stats.df

ans =

Columns 1 through 10

247.8120 421.1950 419.6467 421.1950 423.9979 416.6873 414.4881 423.8976 420.1435 262.6222

Columns 11 through 20

411.8252 407.8769 423.3349 345.4193 356.8056 408.2729 349.6014 394.9389 362.4195 378.6862

Columns 21 through 30

340.8986 411.7077 406.1502 257.3486 413.3590 421.3262 NaN 374.5004 248.7106 374.2474

Columns 31 through 40

401.1507 423.7269 401.1136 374.5946 374.5884 327.6824 376.1750 375.6713 356.3053 378.9181

Columns 41 through 50

353.3992 348.8631 421.9465 420.6196 421.0572 413.4553 422.1894 416.2372 307.4682 418.7417

Columns 51 through 60

331.9718 406.4755 420.8793 353.3748 417.0100 306.2627 423.9694 292.0078 393.0200 NaN

>> stats.sd

ans =

1.0e+03 *

Columns 1 through 10

0.0005	0.0214	0.1717	0.0214	0.0017	0.0128	0.0016	0.0012	0.0014	0.2072
0.0017	0.0192	0.1848	0.0192	0.0016	0.0109	0.0014	0.0012	0.0012	0.5664

Columns 11 through 20

0.0167	0.0004	0.4919	0.0206	0.0017	0.0124	0.0017	0.0200	0.0015	0.0016
0.0193	0.0003	0.4976	0.0119	0.0011	0.0099	0.0010	0.0147	0.0010	0.0011

Columns 21 through 30

0.0014	0.0030	0.0107	0.3793	0.0020	0.0253	0	0.0034	0.0038	0.0163
0.0008	0.0034	0.0129	1.0934	0.0023	0.0227	0	0.0049	0.0122	0.0231

Columns 31 through 40

0.0147	0.0209	0.0147	0.0142	0.0142	0.0009	0.0076	0.0075	0.0091	0.0208
0.0183	0.0208	0.0183	0.0202	0.0202	0.0005	0.0107	0.0105	0.0140	0.0289

Columns 41 through 50

0.0069	0.0074	0.0037	0.0094	0.0094	0.0180	0.0312	0.0120	0.0026	0.0080
0.0041	0.0043	0.0038	0.0100	0.0100	0.0149	0.0284	0.0134	0.0051	0.0087

Columns 51 through 60

0.0039	0.0086	0.0089	0.0039	0.0084	0.0030	0.0083	0.0030	0.0089	NaN
0.0068	0.0103	0.0094	0.0061	0.0093	0.0060	0.0080	0.0065	0.0065	NaN

>>

```
>> hr
```

```
hr =
```

Columns 1 through 18

```
0 0 0 1 0 1 1 0 0 0 0 0 0 1 1 1 0 1
```

Columns 19 through 36

```
1 0 1 0 0 0 1 NaN 0 0 0 0 0 1 0 1 0 1 0
```

Columns 37 through 54

```
0 0 0 1 0 1 0 0 1 1 0 0 0 1 0 1 1 0
```

Columns 55 through 60

```
0 0 1 0 1 NaN
```

```
>> pr
```

```
pr =
```

Columns 1 through 10

```
1.0000 1.0000 1.0000 0.0000 0.9834 0.0001 0.0002 1.0000 0.9448 0.9999
```

Columns 11 through 20

```
1.0000 0.6777 0.3449 0.0051 0.0127 0.0001 0.0976 0.0000 0.0010 0.5662
```

Columns 21 through 30

```
0.0164 0.1430 0.8972 1.0000 1.0000 0.0000 NaN 1.0000 1.0000 1.0000
```

Columns 31 through 40

```
1.0000 0.9999 0.0000 1.0000 0.0000 0.9995 1.0000 1.0000 1.0000 0.0000
```

Columns 41 through 50

```
1.0000 0.0000 0.5234 1.0000 0.0000 0.0020 0.9999 0.6954 1.0000 0.0149
```

Columns 51 through 60

```
1.0000 0.0000 0.0000 1.0000 0.4081 1.0000 0.0011 1.0000 0.0000 NaN
```

```

>> cir

cir =

Columns 1 through 10

-0.9942 -16.2206 -122.0054  9.7378 -0.5997  2.6233  0.2862 -0.9412 -0.4195 -228.1601
    Inf      Inf      Inf      Inf      Inf      Inf      Inf      Inf      Inf      Inf

Columns 11 through 20

-14.9388 -0.0749 -59.8930  1.5202  0.0823  2.4589 -0.0468  7.8329  0.1822 -0.2434
    Inf      Inf      Inf      Inf      Inf      Inf      Inf      Inf      Inf      Inf

Columns 21 through 30

0.0556 -0.1814 -3.3606 -450.1025 -1.2674 13.4576      NaN -2.8333 -5.2658 -21.5677
    Inf      Inf      Inf      Inf      Inf      Inf      Inf      Inf      Inf      Inf

Columns 31 through 40

-21.2967 -11.0322 15.9856 -19.8877 14.2946 -0.3592 -11.8500 -11.6991 -8.6116 23.2991
    Inf      Inf      Inf      Inf      Inf      Inf      Inf      Inf      Inf      Inf

Columns 41 through 50

-3.4490  1.6105 -0.6213 -8.0829  4.9778  1.9921 -15.4842 -2.6710 -3.3544  0.4312
    Inf      Inf      Inf      Inf      Inf      Inf      Inf      Inf      Inf      Inf

Columns 51 through 60

-3.9983  2.3740  2.0826 -3.9424 -1.2115 -4.2254  1.1421 -4.3914  3.5308      NaN
    Inf      Inf      Inf      Inf      Inf      Inf      Inf      Inf      Inf      Inf

>> statsr.tstat

ans =

Columns 1 through 10

-6.2410 -6.6009 -5.4054  6.6009 -2.1362  3.9210  3.6173 -6.4497 -1.6000 -3.8408

Columns 11 through 20

-6.8706 -0.4617  0.3994  2.5861  2.2451  3.9201  1.2980  6.2731  3.1107 -0.1667

Columns 21 through 30

2.1439  1.0682 -1.2676 -3.9934 -4.3002  7.4215      NaN -5.2569 -4.3006 -9.4636

```

Columns 31 through 40

-11.5696 -3.8184 11.5707 -10.0764 10.0770 -3.3037 -11.5362 -11.5413 -5.8660 11.1872

Columns 41 through 50

-4.6652 4.4149 -0.0586 -6.9763 6.9398 2.8940 -3.7034 -0.5115 -6.8018 2.1809

Columns 51 through 60

-5.7475 4.2324 4.0030 -6.3217 0.2325 -7.4328 3.0877 -7.3184 6.3467 NaN

>> statsr.df

ans =

Columns 1 through 10

247.8120 421.1950 419.6467 421.1950 423.9979 416.6873 414.4881 423.8976 420.1435 262.6222

Columns 11 through 20

411.8252 407.8769 423.3349 345.4193 356.8056 408.2729 349.6014 394.9389 362.4195 378.6862

Columns 21 through 30

340.8986 411.7077 406.1502 257.3486 413.3590 421.3262 NaN 374.5004 248.7106 374.2474

Columns 31 through 40

401.1507 423.7269 401.1136 374.5946 374.5884 327.6824 376.1750 375.6713 356.3053 378.9181

Columns 41 through 50

353.3992 348.8631 421.9465 420.6196 421.0572 413.4553 422.1894 416.2372 307.4682 418.7417

Columns 51 through 60

331.9718 406.4755 420.8793 353.3748 417.0100 306.2627 423.9694 292.0078 393.0200 NaN

>> statsr.sd

ans =

1.0e+03 *

Columns 1 through 10

0.0005 0.0214 0.1717 0.0214 0.0017 0.0128 0.0016 0.0012 0.0014 0.2072

0.0017 0.0192 0.1848 0.0192 0.0016 0.0109 0.0014 0.0012 0.0012 0.5664

Columns 11 through 20

0.0167 0.0004 0.4919 0.0206 0.0017 0.0124 0.0017 0.0200 0.0015 0.0016
0.0193 0.0003 0.4976 0.0119 0.0011 0.0099 0.0010 0.0147 0.0010 0.0011

Columns 21 through 30

0.0014 0.0030 0.0107 0.3793 0.0020 0.0253 0 0.0034 0.0038 0.0163
0.0008 0.0034 0.0129 1.0934 0.0023 0.0227 0 0.0049 0.0122 0.0231

Columns 31 through 40

0.0147 0.0209 0.0147 0.0142 0.0142 0.0009 0.0076 0.0075 0.0091 0.0208
0.0183 0.0208 0.0183 0.0202 0.0202 0.0005 0.0107 0.0105 0.0140 0.0289

Columns 41 through 50

0.0069 0.0074 0.0037 0.0094 0.0094 0.0180 0.0312 0.0120 0.0026 0.0080
0.0041 0.0043 0.0038 0.0100 0.0100 0.0149 0.0284 0.0134 0.0051 0.0087

Columns 51 through 60

0.0039 0.0086 0.0089 0.0039 0.0084 0.0030 0.0083 0.0030 0.0089 NaN
0.0068 0.0103 0.0094 0.0061 0.0093 0.0060 0.0080 0.0065 0.0065 NaN

>> hl

hl =

Columns 1 through 18

1 1 1 0 1 0 0 1 0 1 1 0 0 0 0 0 0 0

Columns 19 through 36

0 0 0 0 0 1 1 0 NaN 1 1 1 1 1 0 1 0 1

Columns 37 through 54

1 1 1 0 1 0 0 1 0 0 1 0 1 0 1 0 0 1

Columns 55 through 60

0 1 0 1 0 NaN

>> pl

pl =

Columns 1 through 10

0.0000 0.0000 0.0000 1.0000 0.0166 0.9999 0.9998 0.0000 0.0552 0.0001

Columns 11 through 20

0.0000 0.3223 0.6551 0.9949 0.9873 0.9999 0.9024 1.0000 0.9990 0.4338

Columns 21 through 30

0.9836 0.8570 0.1028 0.0000 0.0000 1.0000 NaN 0.0000 0.0000 0.0000

Columns 31 through 40

0.0000 0.0001 1.0000 0.0000 1.0000 0.0005 0.0000 0.0000 0.0000 1.0000

Columns 41 through 50

0.0000 1.0000 0.4766 0.0000 1.0000 0.9980 0.0001 0.3046 0.0000 0.9851

Columns 51 through 60

0.0000 1.0000 1.0000 0.0000 0.5919 0.0000 0.9989 0.0000 1.0000 NaN

>> cil

cil =

Columns 1 through 10

-Inf
-0.5782 -9.7378 -64.9798 16.2206 -0.0773 6.4293 0.7656 -0.5580 0.0063 -90.9949

Columns 11 through 20

-Inf
-9.1571 0.0421 98.1991 6.8729 0.5378 6.0280 0.3923 13.4182 0.5934 0.1987

Columns 21 through 30

-Inf
0.4264 0.8491 0.4390 -186.8144 -0.5649 21.1432 NaN -1.4802 -2.3443 -15.1670

Columns 31 through 40

-Inf
-15.9842 -4.3790 21.2980 -14.2941 19.8880 -0.1199 -8.8861 -8.7741 -4.8321 31.3545

Columns 41 through 50

```
-Inf  
-1.6474 3.5313 0.5786 -4.9931 8.0794 7.2657 -5.9453 1.4060 -2.0448 3.1016
```

Columns 51 through 60

```
-Inf  
-2.2151 5.4034 4.9989 -2.3111 1.6094 -2.6903 3.7583 -2.7755 6.0092 NaN
```

>> statsl.tstat

ans =

Columns 1 through 10

```
-6.2410 -6.6009 -5.4054 6.6009 -2.1362 3.9210 3.6173 -6.4497 -1.6000 -3.8408
```

Columns 11 through 20

```
-6.8706 -0.4617 0.3994 2.5861 2.2451 3.9201 1.2980 6.2731 3.1107 -0.1667
```

Columns 21 through 30

```
2.1439 1.0682 -1.2676 -3.9934 -4.3002 7.4215 NaN -5.2569 -4.3006 -9.4636
```

Columns 31 through 40

```
-11.5696 -3.8184 11.5707 -10.0764 10.0770 -3.3037 -11.5362 -11.5413 -5.8660 11.1872
```

Columns 41 through 50

```
-4.6652 4.4149 -0.0586 -6.9763 6.9398 2.8940 -3.7034 -0.5115 -6.8018 2.1809
```

Columns 51 through 60

```
-5.7475 4.2324 4.0030 -6.3217 0.2325 -7.4328 3.0877 -7.3184 6.3467 NaN
```

>> statsl.df

ans =

Columns 1 through 10

```
247.8120 421.1950 419.6467 421.1950 423.9979 416.6873 414.4881 423.8976 420.1435 262.6222
```

Columns 11 through 20

```
411.8252 407.8769 423.3349 345.4193 356.8056 408.2729 349.6014 394.9389 362.4195 378.6862
```

Columns 21 through 30

340.8986 411.7077 406.1502 257.3486 413.3590 421.3262 NaN 374.5004 248.7106 374.2474

Columns 31 through 40

401.1507 423.7269 401.1136 374.5946 374.5884 327.6824 376.1750 375.6713 356.3053 378.9181

Columns 41 through 50

353.3992 348.8631 421.9465 420.6196 421.0572 413.4553 422.1894 416.2372 307.4682 418.7417

Columns 51 through 60

331.9718 406.4755 420.8793 353.3748 417.0100 306.2627 423.9694 292.0078 393.0200 NaN

>> statsl.sd

ans =

1.0e+03 *

Columns 1 through 10

0.0005	0.0214	0.1717	0.0214	0.0017	0.0128	0.0016	0.0012	0.0014	0.2072
0.0017	0.0192	0.1848	0.0192	0.0016	0.0109	0.0014	0.0012	0.0012	0.5664

Columns 11 through 20

0.0167	0.0004	0.4919	0.0206	0.0017	0.0124	0.0017	0.0200	0.0015	0.0016
0.0193	0.0003	0.4976	0.0119	0.0011	0.0099	0.0010	0.0147	0.0010	0.0011

Columns 21 through 30

0.0014	0.0030	0.0107	0.3793	0.0020	0.0253	0	0.0034	0.0038	0.0163
0.0008	0.0034	0.0129	1.0934	0.0023	0.0227	0	0.0049	0.0122	0.0231

Columns 31 through 40

0.0147	0.0209	0.0147	0.0142	0.0142	0.0009	0.0076	0.0075	0.0091	0.0208
0.0183	0.0208	0.0183	0.0202	0.0202	0.0005	0.0107	0.0105	0.0140	0.0289

Columns 41 through 50

0.0069	0.0074	0.0037	0.0094	0.0094	0.0180	0.0312	0.0120	0.0026	0.0080
0.0041	0.0043	0.0038	0.0100	0.0100	0.0149	0.0284	0.0134	0.0051	0.0087

Columns 51 through 60

0.0039	0.0086	0.0089	0.0039	0.0084	0.0030	0.0083	0.0030	0.0089	NaN
0.0068	0.0103	0.0094	0.0061	0.0093	0.0060	0.0080	0.0065	0.0065	NaN

>> d

d =

Columns 1 through 10

-0.6119 -0.6387 -0.5244 0.6387 -0.2069 0.3791 0.3497 -0.6247 -0.1548 -0.3762

Columns 11 through 20

-0.6672 -0.0446 0.0387 0.2489 0.2162 0.3787 0.1249 0.6054 0.2996 -0.0161

Columns 21 through 30

0.2063 0.1037 -0.1232 -0.3913 -0.4175 0.7181 NaN -0.5119 -0.4216 -0.9215

Columns 31 through 40

-1.1246 -0.3700 1.1247 -0.9812 0.9812 -0.3176 -1.1232 -1.1237 -0.5718 1.0890

Columns 41 through 50

-0.4491 0.4249 -0.0057 -0.6767 0.6731 0.2797 -0.3584 -0.0496 -0.6647 0.2116

Columns 51 through 59

-0.5610 0.4112 0.3882 -0.6163 0.0226 -0.7264 0.2991 -0.7158 0.6124

>>

Young vs. Old

Y =

Columns 1 through 10

0.8306 69.6402 224.6469 30.3598 6.3923 40.8909 2.2632 8.1722 6.0191 182.7416

Columns 11 through 20

27.2809 0.3845 288.0756 58.7081 3.4928 18.5545 3.5120 54.4775 2.2967 5.3349

Columns 21 through 30

3.6364 4.2344 26.0536 337.8852 2.0000 58.8024 1.0000 5.0670 6.2115 14.0493

Columns 31 through 40

15.0373 36.3943 84.9641 12.1986 87.8019 0.2522 7.2732 7.0981 4.9263 80.7110

Columns 41 through 50

46.8952 49.6177 3.4885 10.3928 89.5823 16.5947 58.9713 14.4828 1.7627 12.2120

Columns 51 through 60

2.3177 14.5019 10.9962 2.5852 13.5837 2.0335 11.8627 2.2325 11.4321 NaN

>> O

O =

Columns 1 through 10

0.8820 67.5207 291.0194 32.4793 6.3318 38.7166 2.3917 8.4009 6.0092 142.4700

Columns 11 through 20

30.4249 0.4056 383.1138 58.6498 3.5161 18.8083 3.5668 55.1161 2.1659 5.2673

Columns 21 through 30

3.5991 4.0737 26.7756 263.9585 2.6959 53.1281 1.0000 6.4147 5.6608 20.1908

Columns 31 through 40

22.2935 37.4788 77.7083 19.7046 80.2963 0.3092 10.7747 10.5871 8.9290 69.7097

Columns 41 through 50

46.5516 49.6959 3.7535 11.7189 88.2724 19.5046 63.1065 15.9230 3.2129 11.3028

Columns 51 through 60

3.4359 11.4751 11.9535 3.6972 12.4065 3.6535 10.6060 3.7157 8.6046 NaN

>> h

h =

Columns 1 through 18

0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Columns 19 through 36

0 0 0 0 0 0 1 1 NaN 1 0 1 1 0 1 1 1 0

Columns 37 through 54

1 1 1 1 0 0 0 0 0 0 0 1 0 1 1 0 1

Columns 55 through 60

0 1 0 1 1 NaN

>> p

p =

Columns 1 through 10

0.6934 0.3069 0.0002 0.3069 0.7048 0.0648 0.3836 0.0610 0.9389 0.3421

Columns 11 through 20

0.0912 0.5521 0.0525 0.9718 0.8681 0.8176 0.6845 0.7193 0.3046 0.6170

Columns 21 through 30

0.7445 0.6061 0.5306 0.3641 0.0012 0.0222 NaN 0.0014 0.5431 0.0043

Columns 31 through 40

0.0001 0.6013 0.0001 0.0001 0.0001 0.4473 0.0006 0.0005 0.0013 0.0001

Columns 41 through 50

0.5411 0.8964 0.4666 0.1803 0.1872 0.0711 0.1615 0.2430 0.0007 0.2625

Columns 51 through 60

0.0442 0.0012 0.2858 0.0314 0.1703 0.0009 0.1160 0.0034 0.0003 NaN

>> ci

ci =

Columns 1 through 10

-0.3075 -1.9527 -100.8163 -6.1916 -0.2534 -0.1338 -0.4183 -0.4680 -0.2442 -43.0220
0.2047 6.1916 -31.9286 1.9527 0.3745 4.4825 0.1612 0.0106 0.2641 123.5651

Columns 11 through 20

-6.7944 -0.0908 -191.1231 -3.1887 -0.2991 -2.4152 -0.3201 -4.1283 -0.1193 -0.1980
0.5064 0.0486 1.0466 3.3054 0.2525 1.9077 0.2104 2.8511 0.3808 0.3333

Columns 21 through 30

-0.1875 -0.4514 -2.9830 -86.1265 -1.1140 0.8143 NaN -2.1701 -1.2291 -10.3519
0.2620 0.7729 1.5390 233.9797 -0.2777 10.5343 NaN -0.5254 2.3304 -1.9311

Columns 31 through 40

-10.8612 -5.1611 3.6508 -11.1914 3.8203 -0.2046 -5.4859 -5.4479 -6.4360 5.6421
-3.6512 2.9920 10.8608 -3.8207 11.1909 0.0905 -1.5170 -1.5302 -1.5695 16.3605

Columns 41 through 50

-0.7605 -1.2567 -0.9797 -3.2683 -0.6391 -6.0709 -9.9311 -3.8616 -2.2878 -0.6836
1.4477 1.1004 0.4498 0.6162 3.2590 0.2511 1.6608 0.9811 -0.6126 2.5020

Columns 51 through 60

-2.2072 1.2060 -2.7180 -2.1243 -0.5076 -2.5716 -0.3115 -2.4741 1.3044 NaN
-0.0293 4.8476 0.8034 -0.0999 2.8621 -0.6683 2.8248 -0.4922 4.3505 NaN

>> stats.tstat

ans =

Columns 1 through 10

-0.3945 1.0230 -3.7898 -1.0230 0.3791 1.8516 -0.8722 -1.8783 0.0767 0.9516

Columns 11 through 20

```
-1.6929 -0.5952 -1.9455  0.0353 -0.1661 -0.2308 -0.4066 -0.3597  1.0279  0.5005
```

Columns 21 through 30

```
0.3262  0.5160 -0.6276  0.9091 -3.2742  2.2950      NaN -3.2226  0.6089 -2.8671
```

Columns 31 through 40

```
-3.9566 -0.5229  3.9564 -4.0037  4.0036 -0.7610 -3.4681 -3.5011 -3.2346  4.0351
```

Columns 41 through 50

```
0.6117 -0.1303 -0.7287 -1.3420  1.3211 -1.8097 -1.4024 -1.1692 -3.4042  1.1220
```

Columns 51 through 60

```
-2.0185  3.2680 -1.0688 -2.1597  1.3736 -3.3465  1.5752 -2.9425  3.6490      NaN
```

```
>> stats.df
```

```
ans =
```

Columns 1 through 10

```
420.6534 422.1926 351.7396 422.1926 414.4241 423.8548 422.4341 421.6016 421.3924 288.4702
```

Columns 11 through 20

```
423.6512 397.7719 339.8302 403.5670 405.7895 400.1669 402.1948 423.5199 416.0716 414.2345
```

Columns 21 through 30

```
393.0563 422.5145 423.0120 288.6391 318.4177 416.4523      NaN 373.7940 293.8197 423.6941
```

Columns 31 through 40

```
414.9638 423.9874 414.9654 408.8514 408.8435 305.5234 421.5183 420.8847 377.0153 416.6657
```

Columns 41 through 50

```
415.5922 418.8838 408.7500 422.8181 423.0525 404.5937 423.8907 419.0496 382.1155 421.6371
```

Columns 51 through 60

```
422.4259 399.2492 409.9297 414.8662 403.2914 402.1315 423.9925 392.8391 422.6070      NaN
```

```
>> sd
```

```
Undefined function or variable 'sd'.
```

```
>> stats.sd
```

ans =

1.0e+03 *

Columns 1 through 10

0.0014	0.0203	0.1301	0.0203	0.0015	0.0120	0.0014	0.0012	0.0013	0.5585
0.0013	0.0225	0.2213	0.0225	0.0018	0.0122	0.0016	0.0013	0.0014	0.2546

Columns 11 through 20

0.0191	0.0003	0.3472	0.0185	0.0016	0.0096	0.0015	0.0183	0.0014	0.0015
0.0192	0.0004	0.6266	0.0153	0.0013	0.0129	0.0012	0.0184	0.0012	0.0013

Columns 21 through 30

0.0013	0.0031	0.0114	1.0729	0.0014	0.0267	0	0.0034	0.0119	0.0214
0.0010	0.0034	0.0124	0.4897	0.0028	0.0242	0	0.0051	0.0056	0.0228

Columns 31 through 40

0.0171	0.0209	0.0171	0.0170	0.0170	0.0010	0.0098	0.0096	0.0100	0.0257
0.0206	0.0219	0.0206	0.0215	0.0215	0.0005	0.0110	0.0109	0.0151	0.0305

Columns 41 through 50

0.0053	0.0057	0.0033	0.0097	0.0098	0.0144	0.0296	0.0118	0.0035	0.0079
0.0063	0.0066	0.0042	0.0107	0.0107	0.0186	0.0312	0.0136	0.0052	0.0088

Columns 51 through 60

0.0054	0.0105	0.0082	0.0048	0.0096	0.0043	0.0081	0.0043	0.0081	NaN
0.0060	0.0085	0.0102	0.0058	0.0079	0.0056	0.0084	0.0060	0.0079	NaN

>> hr

hr =

Columns 1 through 18

0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Columns 19 through 36

0	0	0	0	0	0	0	1	NaN	0	0	0	0	0	1	0	1	0
---	---	---	---	---	---	---	---	-----	---	---	---	---	---	---	---	---	---

Columns 37 through 54

0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Columns 55 through 60

0 0 0 0 1 NaN

>> pr

pr =

Columns 1 through 10

0.6533 0.1534 0.9999 0.8466 0.3524 0.0324 0.8082 0.9695 0.4694 0.1710

Columns 11 through 20

0.9544 0.7240 0.9737 0.4859 0.5659 0.5912 0.6578 0.6404 0.1523 0.3085

Columns 21 through 30

0.3722 0.3030 0.7347 0.1820 0.9994 0.0111 NaN 0.9993 0.2715 0.9978

Columns 31 through 40

1.0000 0.6994 0.0000 1.0000 0.0000 0.7764 0.9997 0.9997 0.9993 0.0000

Columns 41 through 50

0.2705 0.5518 0.7667 0.9098 0.0936 0.9645 0.9192 0.8785 0.9996 0.1313

Columns 51 through 60

0.9779 0.0006 0.8571 0.9843 0.0852 0.9996 0.0580 0.9983 0.0001 NaN

>> cir

cir =

Columns 1 through 10

-0.2662 -1.2957 -95.2552 -5.5346 -0.2028 0.2386 -0.3715 -0.4294 -0.2032 -29.5616
Inf Inf Inf Inf Inf Inf Inf Inf Inf Inf

Columns 11 through 20

-6.2055 -0.0795 -175.6076 -2.6647 -0.2546 -2.0664 -0.2773 -3.5653 -0.0789 -0.1552
Inf Inf Inf Inf Inf Inf Inf Inf Inf Inf

Columns 21 through 30

-0.1512 -0.3527 -2.6182 -60.2616 -1.0464 1.5984 NaN -2.0374 -0.9415 -9.6726

```
Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf
```

Columns 31 through 40

```
-10.2796 -4.5034  4.2325 -10.5968  4.4149 -0.1808 -5.1658 -5.1318 -6.0432  6.5068  
Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf
```

Columns 41 through 50

```
-0.5824 -1.0665 -0.8644 -2.9549 -0.3246 -5.5608 -8.9960 -3.4710 -2.1527 -0.4266  
Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf
```

Columns 51 through 60

```
-2.0315  1.4998 -2.4339 -1.9609 -0.2357 -2.4180 -0.0585 -2.3142  1.5501      NaN  
Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf
```

>>

>> cir

cir =

Columns 1 through 10

```
-0.2662 -1.2957 -95.2552 -5.5346 -0.2028  0.2386 -0.3715 -0.4294 -0.2032 -29.5616  
Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf
```

Columns 11 through 20

```
-6.2055 -0.0795 -175.6076 -2.6647 -0.2546 -2.0664 -0.2773 -3.5653 -0.0789 -0.1552  
Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf
```

Columns 21 through 30

```
-0.1512 -0.3527 -2.6182 -60.2616 -1.0464  1.5984      NaN -2.0374 -0.9415 -9.6726  
Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf
```

Columns 31 through 40

```
-10.2796 -4.5034  4.2325 -10.5968  4.4149 -0.1808 -5.1658 -5.1318 -6.0432  6.5068  
Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf
```

Columns 41 through 50

```
-0.5824 -1.0665 -0.8644 -2.9549 -0.3246 -5.5608 -8.9960 -3.4710 -2.1527 -0.4266  
Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf
```

Columns 51 through 60

```
-2.0315  1.4998 -2.4339 -1.9609 -0.2357 -2.4180 -0.0585 -2.3142  1.5501      NaN
```

```
Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf
```

```
>> statsr.tstat
```

```
ans =
```

```
Columns 1 through 10
```

```
-0.3945  1.0230 -3.7898 -1.0230  0.3791  1.8516 -0.8722 -1.8783  0.0767  0.9516
```

```
Columns 11 through 20
```

```
-1.6929 -0.5952 -1.9455  0.0353 -0.1661 -0.2308 -0.4066 -0.3597  1.0279  0.5005
```

```
Columns 21 through 30
```

```
0.3262  0.5160 -0.6276  0.9091 -3.2742  2.2950      NaN -3.2226  0.6089 -2.8671
```

```
Columns 31 through 40
```

```
-3.9566 -0.5229  3.9564 -4.0037  4.0036 -0.7610 -3.4681 -3.5011 -3.2346  4.0351
```

```
Columns 41 through 50
```

```
0.6117 -0.1303 -0.7287 -1.3420  1.3211 -1.8097 -1.4024 -1.1692 -3.4042  1.1220
```

```
Columns 51 through 60
```

```
-2.0185  3.2680 -1.0688 -2.1597  1.3736 -3.3465  1.5752 -2.9425  3.6490      NaN
```

```
>> statsr.df
```

```
ans =
```

```
Columns 1 through 10
```

```
420.6534 422.1926 351.7396 422.1926 414.4241 423.8548 422.4341 421.6016 421.3924 288.4702
```

```
Columns 11 through 20
```

```
423.6512 397.7719 339.8302 403.5670 405.7895 400.1669 402.1948 423.5199 416.0716 414.2345
```

```
Columns 21 through 30
```

```
393.0563 422.5145 423.0120 288.6391 318.4177 416.4523      NaN 373.7940 293.8197 423.6941
```

```
Columns 31 through 40
```

```
414.9638 423.9874 414.9654 408.8514 408.8435 305.5234 421.5183 420.8847 377.0153 416.6657
```

Columns 41 through 50

415.5922 418.8838 408.7500 422.8181 423.0525 404.5937 423.8907 419.0496 382.1155 421.6371

Columns 51 through 60

422.4259 399.2492 409.9297 414.8662 403.2914 402.1315 423.9925 392.8391 422.6070 NaN

>> statsr.sd

ans =

1.0e+03 *

Columns 1 through 10

0.0014	0.0203	0.1301	0.0203	0.0015	0.0120	0.0014	0.0012	0.0013	0.5585
0.0013	0.0225	0.2213	0.0225	0.0018	0.0122	0.0016	0.0013	0.0014	0.2546

Columns 11 through 20

0.0191	0.0003	0.3472	0.0185	0.0016	0.0096	0.0015	0.0183	0.0014	0.0015
0.0192	0.0004	0.6266	0.0153	0.0013	0.0129	0.0012	0.0184	0.0012	0.0013

Columns 21 through 30

0.0013	0.0031	0.0114	1.0729	0.0014	0.0267	0	0.0034	0.0119	0.0214
0.0010	0.0034	0.0124	0.4897	0.0028	0.0242	0	0.0051	0.0056	0.0228

Columns 31 through 40

0.0171	0.0209	0.0171	0.0170	0.0170	0.0010	0.0098	0.0096	0.0100	0.0257
0.0206	0.0219	0.0206	0.0215	0.0215	0.0005	0.0110	0.0109	0.0151	0.0305

Columns 41 through 50

0.0053	0.0057	0.0033	0.0097	0.0098	0.0144	0.0296	0.0118	0.0035	0.0079
0.0063	0.0066	0.0042	0.0107	0.0107	0.0186	0.0312	0.0136	0.0052	0.0088

Columns 51 through 60

0.0054	0.0105	0.0082	0.0048	0.0096	0.0043	0.0081	0.0043	0.0081	NaN
0.0060	0.0085	0.0102	0.0058	0.0079	0.0056	0.0084	0.0060	0.0079	NaN

>> hl

hl =

Columns 1 through 18

```
0 0 1 0 0 0 1 0 0 1 0 1 0 0 0 0 0
```

Columns 19 through 36

```
0 0 0 0 0 1 0 NaN 1 0 1 1 0 0 1 0 0
```

Columns 37 through 54

```
1 1 1 0 0 0 0 0 1 0 0 1 0 1 0 0 1
```

Columns 55 through 60

```
0 1 0 1 0 NaN
```

```
>> pl
```

```
pl =
```

Columns 1 through 10

```
0.3467 0.8466 0.0001 0.1534 0.6476 0.9676 0.1918 0.0305 0.5306 0.8290
```

Columns 11 through 20

```
0.0456 0.2760 0.0263 0.5141 0.4341 0.4088 0.3422 0.3596 0.8477 0.6915
```

Columns 21 through 30

```
0.6278 0.6970 0.2653 0.8180 0.0006 0.9889 NaN 0.0007 0.7285 0.0022
```

Columns 31 through 40

```
0.0000 0.3006 1.0000 0.0000 1.0000 0.2236 0.0003 0.0003 0.0007 1.0000
```

Columns 41 through 50

```
0.7295 0.4482 0.2333 0.0902 0.9064 0.0355 0.0808 0.1215 0.0004 0.8687
```

Columns 51 through 60

```
0.0221 0.9994 0.1429 0.0157 0.9148 0.0004 0.9420 0.0017 0.9999 NaN
```

```
>> cil
```

```
cil =
```

Columns 1 through 10

```
-Inf  
0.1634 5.5346 -37.4897 1.2957 0.3239 4.1101 0.1144 -0.0280 0.2231 110.1047
```

Columns 11 through 20

-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
-0.0826	0.0373	-14.4688	2.7814	0.2080	1.5589	0.1676	2.2881	0.3404	0.2905		

Columns 21 through 30

-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
0.2258	0.6741	1.1742	208.1149	-0.3453	9.7501	NaN	-0.6581	2.0428	-2.6104		

Columns 31 through 40

-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
-4.2329	2.3343	10.2791	-4.4153	10.5963	0.0667	-1.8371	-1.8462	-1.9622	15.4958		

Columns 41 through 50

-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
1.2696	0.9102	0.3345	0.3028	2.9445	-0.2589	0.7257	0.5904	-0.7478	2.2450		

Columns 51 through 60

-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
-0.2050	4.5538	0.5193	-0.2632	2.5903	-0.8219	2.5718	-0.6521	4.1048	NaN		

>> stats1.tstat

ans =

Columns 1 through 10

-0.3945	1.0230	-3.7898	-1.0230	0.3791	1.8516	-0.8722	-1.8783	0.0767	0.9516		
---------	--------	---------	---------	--------	--------	---------	---------	--------	--------	--	--

Columns 11 through 20

-1.6929	-0.5952	-1.9455	0.0353	-0.1661	-0.2308	-0.4066	-0.3597	1.0279	0.5005		
---------	---------	---------	--------	---------	---------	---------	---------	--------	--------	--	--

Columns 21 through 30

0.3262	0.5160	-0.6276	0.9091	-3.2742	2.2950	NaN	-3.2226	0.6089	-2.8671		
--------	--------	---------	--------	---------	--------	-----	---------	--------	---------	--	--

Columns 31 through 40

-3.9566	-0.5229	3.9564	-4.0037	4.0036	-0.7610	-3.4681	-3.5011	-3.2346	4.0351		
---------	---------	--------	---------	--------	---------	---------	---------	---------	--------	--	--

Columns 41 through 50

0.6117	-0.1303	-0.7287	-1.3420	1.3211	-1.8097	-1.4024	-1.1692	-3.4042	1.1220		
--------	---------	---------	---------	--------	---------	---------	---------	---------	--------	--	--

Columns 51 through 60

-2.0185 3.2680 -1.0688 -2.1597 1.3736 -3.3465 1.5752 -2.9425 3.6490 NaN

>> statsl.df

ans =

Columns 1 through 10

420.6534 422.1926 351.7396 422.1926 414.4241 423.8548 422.4341 421.6016 421.3924 288.4702

Columns 11 through 20

423.6512 397.7719 339.8302 403.5670 405.7895 400.1669 402.1948 423.5199 416.0716 414.2345

Columns 21 through 30

393.0563 422.5145 423.0120 288.6391 318.4177 416.4523 NaN 373.7940 293.8197 423.6941

Columns 31 through 40

414.9638 423.9874 414.9654 408.8514 408.8435 305.5234 421.5183 420.8847 377.0153 416.6657

Columns 41 through 50

415.5922 418.8838 408.7500 422.8181 423.0525 404.5937 423.8907 419.0496 382.1155 421.6371

Columns 51 through 60

422.4259 399.2492 409.9297 414.8662 403.2914 402.1315 423.9925 392.8391 422.6070 NaN

>> statsl.sd

ans =

1.0e+03 *

Columns 1 through 10

0.0014	0.0203	0.1301	0.0203	0.0015	0.0120	0.0014	0.0012	0.0013	0.5585
0.0013	0.0225	0.2213	0.0225	0.0018	0.0122	0.0016	0.0013	0.0014	0.2546

Columns 11 through 20

0.0191	0.0003	0.3472	0.0185	0.0016	0.0096	0.0015	0.0183	0.0014	0.0015
0.0192	0.0004	0.6266	0.0153	0.0013	0.0129	0.0012	0.0184	0.0012	0.0013

Columns 21 through 30

```
0.0013  0.0031  0.0114  1.0729  0.0014  0.0267      0  0.0034  0.0119  0.0214  
0.0010  0.0034  0.0124  0.4897  0.0028  0.0242      0  0.0051  0.0056  0.0228
```

Columns 31 through 40

```
0.0171  0.0209  0.0171  0.0170  0.0170  0.0010  0.0098  0.0096  0.0100  0.0257  
0.0206  0.0219  0.0206  0.0215  0.0215  0.0005  0.0110  0.0109  0.0151  0.0305
```

Columns 41 through 50

```
0.0053  0.0057  0.0033  0.0097  0.0098  0.0144  0.0296  0.0118  0.0035  0.0079  
0.0063  0.0066  0.0042  0.0107  0.0107  0.0186  0.0312  0.0136  0.0052  0.0088
```

Columns 51 through 60

```
0.0054  0.0105  0.0082  0.0048  0.0096  0.0043  0.0081  0.0043  0.0081  NaN  
0.0060  0.0085  0.0102  0.0058  0.0079  0.0056  0.0084  0.0060  0.0079  NaN
```

>> d

d =

Columns 1 through 10

```
-0.0383  0.0990  -0.3640  -0.0990  0.0366  0.1794  -0.0844  -0.1817  0.0074  0.0934
```

Columns 11 through 20

```
-0.1640  -0.0574  -0.1867  0.0034  -0.0162  -0.0222  -0.0396  -0.0349  0.0998  0.0486
```

Columns 21 through 30

```
0.0318  0.0499  -0.0607  0.0892  -0.3137  0.2228    NaN  -0.3100  0.0597  -0.2775
```

Columns 31 through 40

```
-0.3821  -0.0506  0.3821  -0.3864  0.3863  -0.0746  -0.3354  -0.3385  -0.3112  0.3898
```

Columns 41 through 50

```
0.0591  -0.0126  -0.0703  -0.1298  0.1278  -0.1745  -0.1358  -0.1130  -0.3277  0.1085
```

Columns 51 through 59

```
-0.1953  0.3180  -0.1031  -0.2086  0.1336  -0.3227  0.1525  -0.2835  0.3538
```

>>

Lay Females vs. Lay Males

>> F

F =

Columns 1 through 10

0.4111 66.5931 201.9500 33.4069 5.6944 40.7750 2.4861 7.6250 5.4861 52.4167

Columns 11 through 20

21.7542 0.4619 336.4472 61.2500 3.6944 19.2958 3.6389 59.6222 2.4306 5.0833

Columns 21 through 30

3.7083 4.3333 24.6153 92.3472 1.9028 62.4431 1.0000 4.4583 3.1472 7.3958

Columns 31 through 40

10.7069 31.6333 89.2972 8.1361 91.8653 0.1278 4.5944 4.5125 3.5417 87.3556

Columns 41 through 50

46.3958 50.3486 3.2597 10.0722 89.9292 18.3056 59.5069 14.4958 1.4292 13.4556

Columns 51 through 60

1.2569 14.8069 13.4236 1.7069 12.7667 1.3194 12.4431 1.1986 11.6833 NaN

>> M

M =

Columns 1 through 10

0.4472 55.6514 189.0681 44.3486 6.4583 41.9167 2.5972 8.0694 6.1250 82.9722

Columns 11 through 20

22.4181 0.3119 377.3750 62.1250 3.8333 21.9361 3.7639 60.2181 2.4722 5.3472

Columns 21 through 30

3.8472 4.0694 26.3597 136.3056 1.6111 67.6542 1.0000 4.5000 4.8042 5.4236

Columns 31 through 40

5.8514 34.1333 94.1500 4.6569 95.3444 0.0708 2.3361 2.1514 2.3208 93.1958

Columns 41 through 50

45.4278 51.3361 3.2347 4.8111 95.1889 24.5875 53.7208 17.4903 0.7111 12.8250

Columns 51 through 60

1.0736 13.2333 13.6931 0.4986 13.0347 0.8000 12.4347 0.8667 13.3292 NaN

>> h

h =

Columns 1 through 18

0 1 0 1 1 0 0 1 1 1 0 1 0 0 0 0 0 0

Columns 19 through 36

0 0 0 0 0 0 0 NaN 0 1 0 1 0 1 0 0 0 0 0

Columns 37 through 54

0 1 0 0 0 0 0 1 1 1 0 0 0 0 0 0 0 0 1

Columns 55 through 60

0 0 0 0 0 NaN

>> p

p =

Columns 1 through 10

0.5358 0.0030 0.5673 0.0030 0.0029 0.5759 0.6697 0.0185 0.0029 0.0274

Columns 11 through 20

0.7899 0.0492 0.6655 0.7939 0.6226 0.2332 0.6489 0.8587 0.8671 0.3346

Columns 21 through 30

0.5482 0.6025 0.3643 0.0628 0.2975 0.2149 NaN 0.9375 0.0044 0.3773

Columns 31 through 40

0.0370 0.4610 0.0371 0.1093 0.1093 0.1548 0.0627 0.0475 0.3095 0.0754

Columns 41 through 50

0.4206 0.4432 0.9642 0.0009 0.0009 0.0480 0.2456 0.1724 0.1104 0.6410

Columns 51 through 60

0.7565 0.2169 0.8613 0.0113 0.8336 0.2694 0.9948 0.4495 0.2881 NaN

>> ci

ci =

Columns 1 through 10

-0.1513 3.7857 -31.5319 -18.0977 -1.2626 -5.1665 -0.6249 -0.8130 -1.0563 -57.6354
0.0790 18.0977 57.2958 -3.7857 -0.2652 2.8831 0.4027 -0.0759 -0.2215 -3.4757

Columns 11 through 20

-5.5835 0.0006 -228.0220 -7.4843 -0.6955 -7.0063 -0.6665 -7.2039 -0.5329 -0.8028
4.2558 0.2995 146.1664 5.7343 0.4177 1.7257 0.4165 6.0122 0.4495 0.2750

Columns 21 through 30

-0.5951 -0.7357 -5.5361 -90.3163 -0.2600 -13.4807 NaN -1.0909 -2.7852 -2.4307
0.3173 1.2635 2.0472 2.3997 0.8434 3.0584 NaN 1.0075 -0.5287 6.3751

Columns 31 through 40

0.2965 -9.1886 -9.4108 -0.7901 -7.7480 -0.0218 -0.1216 0.0260 -1.1456 -12.2871
9.4146 4.1886 -0.2948 7.7485 0.7897 0.1357 4.6383 4.6962 3.5873 0.6065

Columns 41 through 50

-1.4017 -3.5271 -1.0735 2.1971 -8.3239 -12.5078 -4.0245 -7.3151 -0.1661 -2.0366
3.3378 1.5521 1.1235 8.3252 -2.1956 -0.0561 15.5967 1.3262 1.6022 3.2977

Columns 51 through 60

-0.9850 -0.9347 -3.3121 0.2795 -2.7851 -0.4067 -2.5128 -0.5336 -4.7004 NaN
1.3517 4.0819 2.7732 2.1372 2.2490 1.4456 2.5295 1.1975 1.4087 NaN

>> stats.tstat

ans =

Columns 1 through 10

-0.6209 3.0227 0.5734 -3.0227 -3.0289 -0.5607 -0.4275 -2.3850 -3.0261 -2.2404

Columns 11 through 20

-0.2670 1.9922 -0.4334 -0.2617 -0.4933 -1.1989 -0.4563 -0.1784 -0.1677 -0.9681

Columns 21 through 30

-0.6019 0.5220 -0.9106 -1.8812 1.0460 -1.2457 NaN -0.0786 -2.9097 0.8858

Columns 31 through 40

2.1067 -0.7394 -2.1060 1.6121 -1.6123 1.4312 1.8779 2.0012 1.0198 -1.7927

Columns 41 through 50

0.8078 -0.7691 0.0450 3.3997 -3.3987 -1.9952 1.1659 -1.3731 1.6084 0.4673

Columns 51 through 60

0.3108 1.2402 -0.1751 2.5818 -0.2105 1.1087 0.0065 0.7585 -1.0671 NaN

>> stats.df

ans =

Columns 1 through 10

120.0755 141.6154 141.1618 141.6154 137.1104 141.9412 141.4601 136.4577 140.4277 93.8414

Columns 11 through 20

127.6305 96.5533 112.5066 141.7035 141.9256 106.3335 141.8211 132.3436 141.6491 140.5049

Columns 21 through 30

141.6487 139.6185 123.6132 100.2931 128.0440 141.3784 NaN 130.3369 112.2214 136.1428

Columns 31 through 40

132.2714 130.4898 132.2809 131.1106 131.1044 129.8495 125.4029 124.7454 141.7133 126.7592

Columns 41 through 50

136.8954 133.8293 137.7952 119.5468 119.5437 137.6679 141.9812 112.5033 116.8749 141.9947

Columns 51 through 60

116.8592 141.5188 137.6793 96.9580 141.8824 141.5315 132.4506 134.1500 117.4942 NaN

>> stats.sd

ans =

Columns 1 through 10

0.2641	21.1458	139.8948	21.1458	1.6499	12.0910	1.5105	0.9991	1.3321	43.5799
0.4169	22.2781	129.5000	22.2781	1.3629	12.3397	1.6068	1.2256	1.1979	107.2060

Columns 11 through 20

12.1600	0.5867	696.6963	20.5137	1.7086	8.5719	1.6725	17.1243	1.5275	1.7178
17.2396	0.2532	395.7992	19.5959	1.6699	16.6047	1.6141	22.5897	1.4532	1.5488

Columns 21 through 30

1.4186	2.8284	9.0086	83.5513	1.9295	24.2524	0	2.6640	2.3791	11.8928
1.3496	3.2255	13.5297	179.8130	1.3692	25.9175	0	3.6270	4.2056	14.6789

Columns 31 through 40

15.5917	17.0087	15.5873	14.6968	14.6958	0.2728	8.4263	8.2915	7.3423	22.6843
11.8057	23.1027	11.8041	10.9248	10.9230	0.1989	5.7552	5.6102	7.0191	15.7987

Columns 41 through 50

6.4588	6.6850	3.6126	11.1164	11.1168	17.1342	29.6050	9.1401	3.2407	8.1202
7.8538	8.6036	3.0281	6.9892	6.9892	20.4988	29.9481	16.0894	1.9617	8.0705

Columns 51 through 60

2.5919	7.8317	10.0170	3.6414	7.5288	2.8907	6.5407	2.9262	6.8214	NaN
4.2827	7.3876	8.3749	1.5846	7.7488	2.7289	8.6133	2.2862	11.1695	NaN

>> hr

hr =

Columns 1 through 18

0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Columns 19 through 36

0	0	0	0	0	0	0	NaN	0	0	0	1	0	0	0	0	0	0
---	---	---	---	---	---	---	-----	---	---	---	---	---	---	---	---	---	---

Columns 37 through 54

1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Columns 55 through 60

```

0 0 0 0 0 NaN

>> pr

pr =

Columns 1 through 10

0.7321 0.0015 0.2836 0.9985 0.9985 0.7121 0.6652 0.9908 0.9985 0.9863

Columns 11 through 20

0.6051 0.0246 0.6672 0.6030 0.6887 0.8834 0.6756 0.5706 0.5665 0.8327

Columns 21 through 30

0.7259 0.3013 0.8179 0.9686 0.1488 0.8925     NaN 0.5313 0.9978 0.1886

Columns 31 through 40

0.0185 0.7695 0.9815 0.0547 0.9453 0.0774 0.0314 0.0238 0.1548 0.9623

Columns 41 through 50

0.2103 0.7784 0.4821 0.0005 0.9995 0.9760 0.1228 0.9138 0.0552 0.3205

Columns 51 through 60

0.3783 0.1085 0.5694 0.0057 0.5832 0.1347 0.4974 0.2247 0.8559     NaN

>> cir

cir =

Columns 1 through 10

-0.1325 4.9483 -24.3159 -16.9351 -1.1815 -4.5126 -0.5414 -0.7531 -0.9885 -53.2123
    Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf

Columns 11 through 20

-4.7833 0.0250 -197.5430 -6.4105 -0.6051 -6.2945 -0.5785 -6.1295 -0.4531 -0.7152
    Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf

Columns 21 through 30

-0.5209 -0.5733 -4.9191 -82.7521 -0.1703 -12.1371     NaN -0.9203 -2.6014 -1.7150
    Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf

```

Columns 31 through 40

1.0377	-8.1010	-8.6697	-0.0959	-7.0539	-0.0090	0.2656	0.4060	-0.7612	-11.2384
Inf	Inf	Inf	Inf	Inf	Inf	Inf	Inf	Inf	Inf

Columns 41 through 50

-1.0165	-3.1143	-0.8950	2.6958	-7.8251	-11.4960	-2.4306	-6.6112	-0.0221	-1.6033
Inf	Inf	Inf	Inf	Inf	Inf	Inf	Inf	Inf	Inf

Columns 51 through 60

-0.7948	-0.5272	-2.8176	0.4311	-2.3761	-0.2562	-2.1029	-0.3929	-4.2030	NaN
Inf	Inf	Inf	Inf	Inf	Inf	Inf	Inf	Inf	Inf

>> statsr.tstat

ans =

Columns 1 through 10

-0.6209	3.0227	0.5734	-3.0227	-3.0289	-0.5607	-0.4275	-2.3850	-3.0261	-2.2404
---------	--------	--------	---------	---------	---------	---------	---------	---------	---------

Columns 11 through 20

-0.2670	1.9922	-0.4334	-0.2617	-0.4933	-1.1989	-0.4563	-0.1784	-0.1677	-0.9681
---------	--------	---------	---------	---------	---------	---------	---------	---------	---------

Columns 21 through 30

-0.6019	0.5220	-0.9106	-1.8812	1.0460	-1.2457	NaN	-0.0786	-2.9097	0.8858
---------	--------	---------	---------	--------	---------	-----	---------	---------	--------

Columns 31 through 40

2.1067	-0.7394	-2.1060	1.6121	-1.6123	1.4312	1.8779	2.0012	1.0198	-1.7927
--------	---------	---------	--------	---------	--------	--------	--------	--------	---------

Columns 41 through 50

0.8078	-0.7691	0.0450	3.3997	-3.3987	-1.9952	1.1659	-1.3731	1.6084	0.4673
--------	---------	--------	--------	---------	---------	--------	---------	--------	--------

Columns 51 through 60

0.3108	1.2402	-0.1751	2.5818	-0.2105	1.1087	0.0065	0.7585	-1.0671	NaN
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>> statsr.df

ans =

Columns 1 through 10

120.0755	141.6154	141.1618	141.6154	137.1104	141.9412	141.4601	136.4577	140.4277	93.8414
----------	----------	----------	----------	----------	----------	----------	----------	----------	---------

Columns 11 through 20

127.6305 96.5533 112.5066 141.7035 141.9256 106.3335 141.8211 132.3436 141.6491 140.5049

Columns 21 through 30

141.6487 139.6185 123.6132 100.2931 128.0440 141.3784 NaN 130.3369 112.2214 136.1428

Columns 31 through 40

132.2714 130.4898 132.2809 131.1106 131.1044 129.8495 125.4029 124.7454 141.7133 126.7592

Columns 41 through 50

136.8954 133.8293 137.7952 119.5468 119.5437 137.6679 141.9812 112.5033 116.8749 141.9947

Columns 51 through 60

116.8592 141.5188 137.6793 96.9580 141.8824 141.5315 132.4506 134.1500 117.4942 NaN

>> statsr.sd

ans =

Columns 1 through 10

0.2641	21.1458	139.8948	21.1458	1.6499	12.0910	1.5105	0.9991	1.3321	43.5799
0.4169	22.2781	129.5000	22.2781	1.3629	12.3397	1.6068	1.2256	1.1979	107.2060

Columns 11 through 20

12.1600	0.5867	696.6963	20.5137	1.7086	8.5719	1.6725	17.1243	1.5275	1.7178
17.2396	0.2532	395.7992	19.5959	1.6699	16.6047	1.6141	22.5897	1.4532	1.5488

Columns 21 through 30

1.4186	2.8284	9.0086	83.5513	1.9295	24.2524	0	2.6640	2.3791	11.8928
1.3496	3.2255	13.5297	179.8130	1.3692	25.9175	0	3.6270	4.2056	14.6789

Columns 31 through 40

15.5917	17.0087	15.5873	14.6968	14.6958	0.2728	8.4263	8.2915	7.3423	22.6843
11.8057	23.1027	11.8041	10.9248	10.9230	0.1989	5.7552	5.6102	7.0191	15.7987

Columns 41 through 50

6.4588	6.6850	3.6126	11.1164	11.1168	17.1342	29.6050	9.1401	3.2407	8.1202
7.8538	8.6036	3.0281	6.9892	6.9892	20.4988	29.9481	16.0894	1.9617	8.0705

Columns 51 through 60

2.5919	7.8317	10.0170	3.6414	7.5288	2.8907	6.5407	2.9262	6.8214	NaN
4.2827	7.3876	8.3749	1.5846	7.7488	2.7289	8.6133	2.2862	11.1695	NaN

>> hl

hl =

Columns 1 through 18

0	0	0	1	1	0	0	1	1	1	0	0	0	0	0	0	0	0
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Columns 19 through 36

0	0	0	0	0	1	0	0	NaN	0	1	0	0	0	1	0	0	0
---	---	---	---	---	---	---	---	-----	---	---	---	---	---	---	---	---	---

Columns 37 through 54

0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Columns 55 through 60

0	0	0	0	0	NaN
---	---	---	---	---	-----

pl =

Columns 1 through 10

0.2679	0.9985	0.7164	0.0015	0.0015	0.2879	0.3348	0.0092	0.0015	0.0137
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Columns 11 through 20

0.3949	0.9754	0.3328	0.3970	0.3113	0.1166	0.3244	0.4294	0.4335	0.1673
--------	--------	--------	--------	--------	--------	--------	--------	--------	--------

Columns 21 through 30

0.2741	0.6987	0.1821	0.0314	0.8512	0.1075	NaN	0.4687	0.0022	0.8114
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Columns 31 through 40

0.9815	0.2305	0.0185	0.9453	0.0547	0.9226	0.9686	0.9762	0.8452	0.0377
--------	--------	--------	--------	--------	--------	--------	--------	--------	--------

Columns 41 through 50

0.7897	0.2216	0.5179	0.9995	0.0005	0.0240	0.8772	0.0862	0.9448	0.6795
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Columns 51 through 60

0.6217	0.8915	0.4306	0.9943	0.4168	0.8653	0.5026	0.7753	0.1441	NaN
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```
>> cil
```

```
cil =
```

Columns 1 through 10

-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
0.0603	16.9351	50.0798	-4.9483	-0.3462	2.2293	0.3192	-0.1358	-0.2893	-7.8988

Columns 11 through 20

-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
3.4556	0.2751	115.6874	4.6605	0.3273	1.0139	0.3285	4.9378	0.3697	0.1874

Columns 21 through 30

-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
0.2432	1.1010	1.4302	-5.1645	0.7536	1.7149	NAN	0.8369	-0.7125	5.6595

Columns 31 through 40

-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
8.6734	3.1010	-1.0358	7.0543	0.0956	0.1229	4.2511	4.3163	3.2028	-0.4422

Columns 41 through 50

-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
2.9526	1.1393	0.9450	7.8264	-2.6944	-1.0679	14.0029	0.6224	1.4582	2.8644

Columns 51 through 60

-Inf	-Inf								
1.1615	3.6744	2.2787	1.9856	1.8400	1.2951	2.1196	1.0568	0.9114	NAN

```
>> stats1.tstat
```

```
ans =
```

Columns 1 through 10

-0.6209	3.0227	0.5734	-3.0227	-3.0289	-0.5607	-0.4275	-2.3850	-3.0261	-2.2404
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Columns 11 through 20

-0.2670	1.9922	-0.4334	-0.2617	-0.4933	-1.1989	-0.4563	-0.1784	-0.1677	-0.9681
---------	--------	---------	---------	---------	---------	---------	---------	---------	---------

Columns 21 through 30

-0.6019	0.5220	-0.9106	-1.8812	1.0460	-1.2457	NAN	-0.0786	-2.9097	0.8858
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Columns 31 through 40

2.1067 -0.7394 -2.1060 1.6121 -1.6123 1.4312 1.8779 2.0012 1.0198 -1.7927

Columns 41 through 50

0.8078 -0.7691 0.0450 3.3997 -3.3987 -1.9952 1.1659 -1.3731 1.6084 0.4673

Columns 51 through 60

0.3108 1.2402 -0.1751 2.5818 -0.2105 1.1087 0.0065 0.7585 -1.0671 NaN

>> stats1.df

ans =

Columns 1 through 10

120.0755 141.6154 141.1618 141.6154 137.1104 141.9412 141.4601 136.4577 140.4277 93.8414

Columns 11 through 20

127.6305 96.5533 112.5066 141.7035 141.9256 106.3335 141.8211 132.3436 141.6491 140.5049

Columns 21 through 30

141.6487 139.6185 123.6132 100.2931 128.0440 141.3784 NaN 130.3369 112.2214 136.1428

Columns 31 through 40

132.2714 130.4898 132.2809 131.1106 131.1044 129.8495 125.4029 124.7454 141.7133 126.7592

Columns 41 through 50

136.8954 133.8293 137.7952 119.5468 119.5437 137.6679 141.9812 112.5033 116.8749 141.9947

Columns 51 through 60

116.8592 141.5188 137.6793 96.9580 141.8824 141.5315 132.4506 134.1500 117.4942 NaN

>> stats1.sd

ans =

Columns 1 through 10

0.2641 21.1458 139.8948 21.1458 1.6499 12.0910 1.5105 0.9991 1.3321 43.5799

0.4169 22.2781 129.5000 22.2781 1.3629 12.3397 1.6068 1.2256 1.1979 107.2060

Columns 11 through 20

12.1600	0.5867	696.6963	20.5137	1.7086	8.5719	1.6725	17.1243	1.5275	1.7178
17.2396	0.2532	395.7992	19.5959	1.6699	16.6047	1.6141	22.5897	1.4532	1.5488

Columns 21 through 30

1.4186	2.8284	9.0086	83.5513	1.9295	24.2524	0	2.6640	2.3791	11.8928
1.3496	3.2255	13.5297	179.8130	1.3692	25.9175	0	3.6270	4.2056	14.6789

Columns 31 through 40

15.5917	17.0087	15.5873	14.6968	14.6958	0.2728	8.4263	8.2915	7.3423	22.6843
11.8057	23.1027	11.8041	10.9248	10.9230	0.1989	5.7552	5.6102	7.0191	15.7987

Columns 41 through 50

6.4588	6.6850	3.6126	11.1164	11.1168	17.1342	29.6050	9.1401	3.2407	8.1202
7.8538	8.6036	3.0281	6.9892	6.9892	20.4988	29.9481	16.0894	1.9617	8.0705

Columns 51 through 60

2.5919	7.8317	10.0170	3.6414	7.5288	2.8907	6.5407	2.9262	6.8214	NaN
4.2827	7.3876	8.3749	1.5846	7.7488	2.7289	8.6133	2.2862	11.1695	NaN

d =

Columns 1 through 10

-0.1035	0.5038	0.0956	-0.5038	-0.5048	-0.0935	-0.0713	-0.3975	-0.5044	-0.3734
---------	--------	--------	---------	---------	---------	---------	---------	---------	---------

Columns 11 through 20

-0.0445	0.3320	-0.0722	-0.0436	-0.0822	-0.1998	-0.0761	-0.0297	-0.0279	-0.1614
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Columns 21 through 30

-0.1003	0.0870	-0.1518	-0.3135	0.1743	-0.2076	NaN	-0.0131	-0.4850	0.1476
---------	--------	---------	---------	--------	---------	-----	---------	---------	--------

Columns 31 through 40

0.3511	-0.1232	-0.3510	0.2687	-0.2687	0.2385	0.3130	0.3335	0.1700	-0.2988
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Columns 41 through 50

0.1346	-0.1282	0.0075	0.5666	-0.5665	-0.3325	0.1943	-0.2289	0.2681	0.0779
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Columns 51 through 59

0.0518	0.2067	-0.0292	0.4303	-0.0351	0.1848	0.0011	0.1264	-0.1778
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Professional Females vs. Professional Males

F =

Columns 1 through 10

0.8507 73.5507 270.3507 26.4493 6.6620 38.0310 2.3239 8.7183 6.3239 142.6338

Columns 11 through 20

29.3282 0.3810 317.6972 56.6761 3.3803 18.7873 3.4085 52.4873 2.0704 5.1408

Columns 21 through 30

3.5070 3.9718 28.8282 268.1690 2.4789 49.5930 1.0000 5.7887 5.6690 19.7197

Columns 31 through 40

26.4845 35.9606 73.5155 23.9338 76.0676 0.3324 12.9380 12.6437 10.9901 63.4254

Columns 41 through 50

47.7704 48.8577 3.3676 12.6915 87.2930 16.7324 68.9183 18.1606 3.5282 9.9127

Columns 51 through 60

4.2606 11.0366 8.3915 4.6394 15.0521 4.3028 7.7648 4.6352 8.3028 NaN

>> M

M =

Columns 1 through 10

1.1347 77.9000 312.2764 22.1000 6.4028 35.7250 1.8750 8.7361 6.0556 309.3194

Columns 11 through 20

38.6889 0.4223 345.1111 54.9583 3.2083 15.5625 3.3611 45.4028 1.9167 5.2917

Columns 21 through 30

3.3750 4.1389 27.2361 592.8056 2.7778 45.6583 1.0000 7.0000 9.6667 31.9958

Columns 31 through 40

31.5653 43.2986 68.4361 27.7278 72.2722 0.5264 16.6181 16.2708 11.1083 55.9972

Columns 41 through 50

48.5611 47.8597 3.5819 16.5014 83.5000 14.0208 66.4167 14.4500 4.3319 10.6194

Columns 51 through 60

5.5625 10.3306 9.3139 5.1542 10.8264 5.4222 11.7194 5.1958 7.0694 NaN

>>

>> h

h =

Columns 1 through 18

0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 1

Columns 19 through 36

0 0 0 0 0 0 0 NaN 0 0 1 0 1 0 0 0 1

Columns 37 through 54

1 1 0 0 0 0 0 1 1 0 0 0 0 0 0 0 0 0

Columns 55 through 60

1 0 1 0 0 NaN

>> p

p =

Columns 1 through 10

0.1314 0.1509 0.0614 0.1509 0.3615 0.1868 0.0537 0.9282 0.2217 0.0933

Columns 11 through 20

0.0038 0.4736 0.7443 0.3838 0.3277 0.0650 0.7811 0.0031 0.3093 0.4231

Columns 21 through 30

0.3046 0.7774 0.4867 0.0907 0.2041 0.2845 NaN 0.0628 0.0721 0.0011

Columns 31 through 40

0.1121 0.0408 0.1122 0.2853 0.2851 0.0345 0.0415 0.0413 0.9641 0.1325

Columns 41 through 50

0.2287 0.1605 0.6789 0.0255 0.0263 0.2303 0.5973 0.1296 0.3713 0.6229

Columns 51 through 60

0.2867 0.6846 0.5548 0.6306 0.0144 0.2988 0.0071 0.6123 0.2916 NaN

>> ci

ci =

Columns 1 through 10

-0.6543 -10.3042 -85.8892 -1.6056 -0.3007 -1.1307 -0.0072 -0.4078 -0.1639 -362.0123
0.0863 1.6056 2.0378 10.3042 0.8190 5.7427 0.9051 0.3722 0.7007 28.6411

Columns 11 through 20

-15.6503 -0.1551 -193.3072 -2.1693 -0.1742 -0.2025 -0.2889 2.4304 -0.1442 -0.5220
-3.0711 0.0725 138.4794 5.6048 0.5181 6.6522 0.3836 11.7387 0.4517 0.2203

Columns 21 through 30

-0.1213 -1.3331 -2.9213 -701.9777 -0.7620 -3.3065 NaN -2.4884 -8.3627 -19.5525
0.3854 0.9990 6.1054 52.7046 0.1642 11.1758 NaN 0.0658 0.3674 -4.9998

Columns 31 through 40

-11.3656 -14.3651 -1.2057 -10.7880 -3.1984 -0.3736 -7.2159 -7.1094 -5.3054 -2.2768
1.2040 -0.3110 11.3645 3.2000 10.7892 -0.0144 -0.1442 -0.1449 5.0691 17.1331

Columns 41 through 50

-2.0842 -0.4008 -1.2362 -7.1462 0.4546 -1.7376 -6.8383 -1.1017 -2.5753 -3.5441
0.5028 2.3968 0.8075 -0.4734 7.1313 7.1607 11.8416 8.5228 0.9678 2.1305

Columns 51 through 60

-3.7087 -2.7298 -4.0036 -2.6279 0.8562 -3.2414 -6.8152 -2.7425 -1.0708 NaN
1.1048 4.1419 2.1590 1.5984 7.5953 1.0026 -1.0941 1.6212 3.5375 NaN

>> stats.tstat

ans =

Columns 1 through 10

-1.5199 -1.4444 -1.8854 1.4444 0.9156 1.3265 1.9498 -0.0903 1.2275 -1.6987

Columns 11 through 20

-2.9430 -0.7189 -0.3268 0.8736 0.9822 1.8601 0.2784 3.0116 1.0205 -0.8034

Columns 21 through 30

1.0305 -0.2832 0.6974 -1.7125 -1.2760 1.0743 NaN -1.8782 -1.8237 -3.3357

Columns 31 through 40

-1.6003 -2.0645 1.5997 -1.0728 1.0732 -2.1372 -2.0584 -2.0601 -0.0451 1.5135

Columns 41 through 50

-1.2094 1.4111 -0.4149 -2.2576 2.2463 1.2050 0.5295 1.5247 -0.8970 -0.4929

Columns 51 through 60

-1.0695 0.4072 -0.5922 -0.4821 2.4843 -1.0429 -2.7343 -0.5080 1.0590 NaN

>> stats.df

ans =

Columns 1 through 10

110.3845 135.4537 140.0271 135.4537 135.0384 140.8516 113.5708 140.1284 139.9249 78.8017

Columns 11 through 20

136.9090 119.3378 136.6449 140.9266 140.7967 140.9920 140.9126 129.2597 136.1619 139.9377

Columns 21 through 30

138.7141 140.6736 139.6661 78.7401 139.0056 139.4144 NaN 117.9930 76.8526 139.4004

Columns 31 through 40

122.7570 140.7176 122.7682 135.8607 135.8634 129.3847 134.6406 134.3699 126.3178 137.5658

Columns 41 through 50

129.5277 134.9112 133.2290 139.9241 139.9562 139.0147 140.2514 137.7375 140.9911 127.7059

Columns 51 through 60

139.6463 110.9147 130.5596 123.9684 114.1591 140.9999 134.3586 140.9865 130.2327 NaN

>> stats.sd

ans =

1.0e+03 *

Columns 1 through 10

0.0014	0.0196	0.1264	0.0196	0.0015	0.0105	0.0017	0.0011	0.0012	0.1890
0.0008	0.0162	0.1393	0.0162	0.0019	0.0103	0.0010	0.0012	0.0014	0.8106

Columns 11 through 20

0.0172	0.0003	0.4511	0.0115	0.0010	0.0103	0.0010	0.0159	0.0010	0.0012
0.0207	0.0004	0.5481	0.0120	0.0011	0.0105	0.0010	0.0119	0.0008	0.0011

Columns 21 through 30

0.0008	0.0036	0.0129	0.3637	0.0015	0.0229	0	0.0029	0.0037	0.0206
0.0007	0.0035	0.0144	1.5663	0.0013	0.0209	0	0.0047	0.0182	0.0233

Columns 31 through 40

0.0222	0.0206	0.0222	0.0230	0.0230	0.0005	0.0117	0.0116	0.0180	0.0314
0.0150	0.0219	0.0150	0.0191	0.0191	0.0006	0.0095	0.0094	0.0128	0.0271

Columns 41 through 50

0.0044	0.0046	0.0027	0.0096	0.0096	0.0141	0.0291	0.0133	0.0053	0.0070
0.0033	0.0038	0.0035	0.0106	0.0106	0.0127	0.0274	0.0157	0.0054	0.0099

Columns 51 through 60

0.0069	0.0127	0.0078	0.0074	0.0123	0.0064	0.0076	0.0066	0.0079	NaN
0.0077	0.0073	0.0106	0.0051	0.0074	0.0065	0.0096	0.0066	0.0059	NaN

>> hr

hr =

Columns 1 through 18

0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	1
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Columns 19 through 36

0	0	0	0	0	0	0	NaN	0	0	0	0	0	0	0	0	0
---	---	---	---	---	---	---	-----	---	---	---	---	---	---	---	---	---

Columns 37 through 54

0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Columns 55 through 60

1 0 0 0 0 NaN

>> pr

pr =

Columns 1 through 10

0.9343 0.9245 0.9693 0.0755 0.1808 0.0934 0.0268 0.5359 0.1109 0.9533

Columns 11 through 20

0.9981 0.7632 0.6278 0.1919 0.1639 0.0325 0.3906 0.0016 0.1547 0.7884

Columns 21 through 30

0.1523 0.6113 0.2434 0.9546 0.8980 0.1423 NaN 0.9686 0.9640 0.9995

Columns 31 through 40

0.9439 0.9796 0.0561 0.8574 0.1425 0.9828 0.9793 0.9793 0.5179 0.0662

Columns 41 through 50

0.8856 0.0803 0.6606 0.9872 0.0131 0.1151 0.2986 0.0648 0.8144 0.6885

Columns 51 through 60

0.8567 0.3423 0.7226 0.6847 0.0072 0.8506 0.9965 0.6939 0.1458 NaN

>> pir

ans =

Number of Ctxs : 0

>> cir

cir =

Columns 1 through 10

-0.5940 -9.3363 -78.7457 -0.6377 -0.2097 -0.5724 0.0671 -0.3444 -0.0937 -330.0121
Inf Inf Inf Inf Inf Inf Inf Inf Inf

Columns 11 through 20

-14.6281 -0.1366 -166.3449 -1.5378 -0.1179 0.3543 -0.2342 3.1873 -0.0958 -0.4617

```
Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf
```

Columns 21 through 30

```
-0.0801 -1.1436 -2.1879 -640.1572 -0.6868 -2.1299      NaN -2.2804 -7.6473 -18.3701
Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf
```

Columns 31 through 40

```
-10.3428 -13.2234 -0.1830 -9.6512 -2.0616 -0.3444 -6.6411 -6.5434 -4.4616 -0.6996
Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf
```

Columns 41 through 50

```
-1.8738 -0.1734 -1.0701 -6.6041 0.9971 -1.0146 -5.3207 -0.3196 -2.2875 -3.0826
Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf
```

Columns 51 through 60

```
-3.3176 -2.1699 -3.5026 -2.2840 1.4050 -2.8966 -6.3502 -2.3880 -0.6961      NaN
Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf
```

>> statsr.tstat

ans =

Columns 1 through 10

```
-1.5199 -1.4444 -1.8854 1.4444 0.9156 1.3265 1.9498 -0.0903 1.2275 -1.6987
```

Columns 11 through 20

```
-2.9430 -0.7189 -0.3268 0.8736 0.9822 1.8601 0.2784 3.0116 1.0205 -0.8034
```

Columns 21 through 30

```
1.0305 -0.2832 0.6974 -1.7125 -1.2760 1.0743      NaN -1.8782 -1.8237 -3.3357
```

Columns 31 through 40

```
-1.6003 -2.0645 1.5997 -1.0728 1.0732 -2.1372 -2.0584 -2.0601 -0.0451 1.5135
```

Columns 41 through 50

```
-1.2094 1.4111 -0.4149 -2.2576 2.2463 1.2050 0.5295 1.5247 -0.8970 -0.4929
```

Columns 51 through 60

```
-1.0695 0.4072 -0.5922 -0.4821 2.4843 -1.0429 -2.7343 -0.5080 1.0590      NaN
```

```
>> statsr.df
```

```
ans =
```

Columns 1 through 10

110.3845 135.4537 140.0271 135.4537 135.0384 140.8516 113.5708 140.1284 139.9249 78.8017

Columns 11 through 20

136.9090 119.3378 136.6449 140.9266 140.7967 140.9920 140.9126 129.2597 136.1619 139.9377

Columns 21 through 30

138.7141 140.6736 139.6661 78.7401 139.0056 139.4144 NaN 117.9930 76.8526 139.4004

Columns 31 through 40

122.7570 140.7176 122.7682 135.8607 135.8634 129.3847 134.6406 134.3699 126.3178 137.5658

Columns 41 through 50

129.5277 134.9112 133.2290 139.9241 139.9562 139.0147 140.2514 137.7375 140.9911 127.7059

Columns 51 through 60

139.6463 110.9147 130.5596 123.9684 114.1591 140.9999 134.3586 140.9865 130.2327 NaN

```
>> statsr.sd
```

```
ans =
```

1.0e+03 *

Columns 1 through 10

0.0014	0.0196	0.1264	0.0196	0.0015	0.0105	0.0017	0.0011	0.0012	0.1890
0.0008	0.0162	0.1393	0.0162	0.0019	0.0103	0.0010	0.0012	0.0014	0.8106

Columns 11 through 20

0.0172	0.0003	0.4511	0.0115	0.0010	0.0103	0.0010	0.0159	0.0010	0.0012
0.0207	0.0004	0.5481	0.0120	0.0011	0.0105	0.0010	0.0119	0.0008	0.0011

Columns 21 through 30

0.0008	0.0036	0.0129	0.3637	0.0015	0.0229	0	0.0029	0.0037	0.0206
0.0007	0.0035	0.0144	1.5663	0.0013	0.0209	0	0.0047	0.0182	0.0233

Columns 31 through 40

```
0.0222 0.0206 0.0222 0.0230 0.0230 0.0005 0.0117 0.0116 0.0180 0.0314  
0.0150 0.0219 0.0150 0.0191 0.0191 0.0006 0.0095 0.0094 0.0128 0.0271
```

Columns 41 through 50

```
0.0044 0.0046 0.0027 0.0096 0.0096 0.0141 0.0291 0.0133 0.0053 0.0070  
0.0033 0.0038 0.0035 0.0106 0.0106 0.0127 0.0274 0.0157 0.0054 0.0099
```

Columns 51 through 60

```
0.0069 0.0127 0.0078 0.0074 0.0123 0.0064 0.0076 0.0066 0.0079 NaN  
0.0077 0.0073 0.0106 0.0051 0.0074 0.0065 0.0096 0.0066 0.0059 NaN
```

>> hl

hl =

Columns 1 through 18

```
0 0 1 0 0 0 0 0 1 1 0 0 0 0 0 0 0
```

Columns 19 through 36

```
0 0 0 0 0 1 0 0 NaN 1 1 1 0 1 0 0 0 1
```

Columns 37 through 54

```
1 1 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0
```

Columns 55 through 60

```
0 0 1 0 0 NaN
```

>> pl

pl =

Columns 1 through 10

```
0.0657 0.0755 0.0307 0.9245 0.8192 0.9066 0.9732 0.4641 0.8891 0.0467
```

Columns 11 through 20

```
0.0019 0.2368 0.3722 0.8081 0.8361 0.9675 0.6094 0.9984 0.8453 0.2116
```

Columns 21 through 30

```
0.8477 0.3887 0.7566 0.0454 0.1020 0.8577 NaN 0.0314 0.0360 0.0005
```

Columns 31 through 40

0.0561 0.0204 0.9439 0.1426 0.8575 0.0172 0.0207 0.0207 0.4821 0.9338

Columns 41 through 50

0.1144 0.9197 0.3394 0.0128 0.9869 0.8849 0.7014 0.9352 0.1856 0.3115

Columns 51 through 60

0.1433 0.6577 0.2774 0.3153 0.9928 0.1494 0.0035 0.3061 0.8542 NaN

>> cil

cil =

Columns 1 through 10

-Inf
0.0260 0.6377 -5.1056 9.3363 0.7280 5.1843 0.8308 0.3088 0.6304 -3.3592

Columns 11 through 20

-Inf
-4.0934 0.0539 111.5170 4.9732 0.4618 6.0953 0.3289 10.9818 0.4033 0.1600

Columns 21 through 30

-Inf
0.3442 0.8095 5.3720 -9.1159 0.0890 9.9991 NaN -0.1421 -0.3480 -6.1821

Columns 31 through 40

-Inf
0.1813 -1.4527 10.3417 2.0632 9.6524 -0.0436 -0.7189 -0.7110 4.2252 15.5559

Columns 41 through 50

-Inf
0.2925 2.1694 0.6414 -1.0156 6.5888 6.4377 10.3240 7.7407 0.6800 1.6690

Columns 51 through 60

-Inf
0.7137 3.5821 1.6579 1.2546 7.0464 0.6578 -1.5591 1.2667 3.1628 NaN

>> stats1.tstat

ans =

Columns 1 through 10

-1.5199 -1.4444 -1.8854 1.4444 0.9156 1.3265 1.9498 -0.0903 1.2275 -1.6987

Columns 11 through 20

-2.9430 -0.7189 -0.3268 0.8736 0.9822 1.8601 0.2784 3.0116 1.0205 -0.8034

Columns 21 through 30

1.0305 -0.2832 0.6974 -1.7125 -1.2760 1.0743 NaN -1.8782 -1.8237 -3.3357

Columns 31 through 40

-1.6003 -2.0645 1.5997 -1.0728 1.0732 -2.1372 -2.0584 -2.0601 -0.0451 1.5135

Columns 41 through 50

-1.2094 1.4111 -0.4149 -2.2576 2.2463 1.2050 0.5295 1.5247 -0.8970 -0.4929

Columns 51 through 60

-1.0695 0.4072 -0.5922 -0.4821 2.4843 -1.0429 -2.7343 -0.5080 1.0590 NaN

>> stats1.df

ans =

Columns 1 through 10

110.3845 135.4537 140.0271 135.4537 135.0384 140.8516 113.5708 140.1284 139.9249 78.8017

Columns 11 through 20

136.9090 119.3378 136.6449 140.9266 140.7967 140.9920 140.9126 129.2597 136.1619 139.9377

Columns 21 through 30

138.7141 140.6736 139.6661 78.7401 139.0056 139.4144 NaN 117.9930 76.8526 139.4004

Columns 31 through 40

122.7570 140.7176 122.7682 135.8607 135.8634 129.3847 134.6406 134.3699 126.3178 137.5658

Columns 41 through 50

129.5277 134.9112 133.2290 139.9241 139.9562 139.0147 140.2514 137.7375 140.9911 127.7059

Columns 51 through 60

139.6463 110.9147 130.5596 123.9684 114.1591 140.9999 134.3586 140.9865 130.2327 NaN

>> stats1.sd

ans =

1.0e+03 *

Columns 1 through 10

0.0014	0.0196	0.1264	0.0196	0.0015	0.0105	0.0017	0.0011	0.0012	0.1890
0.0008	0.0162	0.1393	0.0162	0.0019	0.0103	0.0010	0.0012	0.0014	0.8106

Columns 11 through 20

0.0172	0.0003	0.4511	0.0115	0.0010	0.0103	0.0010	0.0159	0.0010	0.0012
0.0207	0.0004	0.5481	0.0120	0.0011	0.0105	0.0010	0.0119	0.0008	0.0011

Columns 21 through 30

0.0008	0.0036	0.0129	0.3637	0.0015	0.0229	0	0.0029	0.0037	0.0206
0.0007	0.0035	0.0144	1.5663	0.0013	0.0209	0	0.0047	0.0182	0.0233

Columns 31 through 40

0.0222	0.0206	0.0222	0.0230	0.0230	0.0005	0.0117	0.0116	0.0180	0.0314
0.0150	0.0219	0.0150	0.0191	0.0191	0.0006	0.0095	0.0094	0.0128	0.0271

Columns 41 through 50

0.0044	0.0046	0.0027	0.0096	0.0096	0.0141	0.0291	0.0133	0.0053	0.0070
0.0033	0.0038	0.0035	0.0106	0.0106	0.0127	0.0274	0.0157	0.0054	0.0099

Columns 51 through 60

0.0069	0.0127	0.0078	0.0074	0.0123	0.0064	0.0076	0.0066	0.0079	Nan
0.0077	0.0073	0.0106	0.0051	0.0074	0.0065	0.0096	0.0066	0.0059	Nan

>> d

d =

Columns 1 through 10

-0.2551 -0.2419 -0.3151 0.2419 0.1529 0.2219 0.3272 -0.0151 0.2051 -0.2823

Columns 11 through 20

-0.4916 -0.1199 -0.0546 0.1461 0.1642 0.3111 0.0466 0.5047 0.1709 -0.1344

Columns 21 through 30

0.1725 -0.0474 0.1166 -0.2846 -0.2136 0.1798 NaN -0.3131 -0.3030 -0.5574

Columns 31 through 40

-0.2683 -0.3451 0.2683 -0.1797 0.1797 -0.3567 -0.3448 -0.3451 -0.0076 0.2534

Columns 41 through 50

-0.2027 0.2363 -0.0693 -0.3773 0.3754 0.2017 0.0886 0.2547 -0.1500 -0.0822

Columns 51 through 59

-0.1787 0.0684 -0.0988 -0.0808 0.4169 -0.1744 -0.4566 -0.0850 0.1775

>>

Young Laymen vs. Old Laymen

>> Y

Y =

Columns 1 through 10

0.4319 63.0000 175.7694 37.0000 6.2917 43.1986 2.4444 7.8472 5.9583 64.3750

Columns 11 through 20

21.2000 0.3422 271.7333 61.0694 3.6944 18.9375 3.5833 57.8042 2.4167 5.0833

Columns 21 through 30

3.6667 4.2083 24.3819 105.1667 1.6250 68.6833 1.0000 4.0556 3.4958 4.3014

Columns 31 through 40

4.7736 32.8389 95.2278 3.0264 96.9736 0.0444 1.2736 1.1375 1.7528 95.8472

Columns 41 through 50

46.5347 50.0472 3.4181 6.3222 93.6792 18.7181 53.4694 14.9764 0.3861 14.1028

Columns 51 through 60

0.4667 14.8208 14.0278 0.2778 13.0097 0.5486 13.7944 0.6014 12.9833 NaN

>> O

O =

Columns 1 through 10

0.4264 59.2444 215.2486 40.7556 5.8611 39.4931 2.6389 7.8472 5.6528 71.0139

Columns 11 through 20

22.9722 0.4316 442.0889 62.3056 3.8333 22.2944 3.8194 62.0361 2.4861 5.3472

Columns 21 through 30

3.8889 4.1944 26.5931 123.4861 1.8889 61.4139 1.0000 4.9028 4.4556 8.5181

Columns 31 through 40

11.7847 32.9278 88.2194 9.7667 90.2361 0.1542 5.6569 5.5264 4.1097 84.7042

Columns 41 through 50

45.2889 51.6375 3.0764 8.5611 91.4389 24.1750 59.7583 17.0097 1.7542 12.1778

Columns 51 through 60

1.8639 13.2194 13.0889 1.9278 12.7917 1.5708 11.0833 1.4639 12.0292 NaN

>> h

h =

Columns 1 through 18

0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Columns 19 through 36

0 0 0 0 0 0 0 NaN 0 0 0 1 0 1 1 1 1

Columns 37 through 54

1 1 1 1 0 0 0 0 0 0 0 1 0 1 0 0 1

Columns 55 through 60

0 1 1 1 0 NaN

>> p

p =

Columns 1 through 10

0.9242 0.3146 0.0785 0.3146 0.0972 0.0680 0.4551 1.0000 0.1601 0.6329

Columns 11 through 20

0.4765 0.2427 0.0717 0.7121 0.6226 0.1294 0.3893 0.2049 0.7802 0.3346

Columns 21 through 30

0.3363 0.9781 0.2503 0.4390 0.3462 0.0828 NaN 0.1093 0.1011 0.0578

Columns 31 through 40

0.0025 0.9791 0.0025 0.0018 0.0018 0.0057 0.0003 0.0002 0.0487 0.0006

Columns 41 through 50

0.2997 0.2163 0.5390 0.1635 0.1633 0.0865 0.2068 0.3549 0.0023 0.1532

Columns 51 through 60

0.0178 0.2089 0.5424 0.0006 0.8643 0.0288 0.0323 0.0483 0.5383 NaN

>> ci

ci =

Columns 1 through 10

-0.1100 -3.6006 -83.5242 -11.1117 -0.0794 -0.2779 -0.7077 -0.3758 -0.1223 -34.0571
0.1211 11.1117 4.5659 3.6006 0.9405 7.6890 0.3188 0.3758 0.7334 20.7793

Columns 11 through 20

-6.6799 -0.2404 -356.0989 -7.8440 -0.6955 -7.7120 -0.7766 -10.8017 -0.5605 -0.8027
3.1354 0.0617 15.3878 5.3718 0.4178 0.9981 0.3044 2.3378 0.4217 0.2750

Columns 21 through 30

-0.6776 -0.9865 -6.0053 -64.9852 -0.8163 -0.9571 NaN -1.8868 -2.1099 -8.5752
0.2332 1.0143 1.5831 28.3464 0.2885 15.4960 NaN 0.1924 0.1904 0.1419

Columns 31 through 40

-11.4981 -6.7877 2.5224 -10.9067 2.5714 -0.1869 -6.6904 -6.6527 -4.7002 4.8761
-2.5242 6.6100 11.4943 -2.5739 10.9036 -0.0325 -2.0762 -2.1251 -0.0137 17.4100

Columns 41 through 50

-1.1213 -4.1231 -0.7555 -5.3996 -0.9204 -11.7065 -16.0916 -6.3707 -2.2340 -0.7253
3.6129 0.9425 1.4388 0.9218 5.4009 0.7926 3.5138 2.3041 -0.5022 4.5753

Columns 51 through 60

-2.5465 -0.9065 -2.1031 -2.5624 -2.2992 -1.9372 0.2318 -1.7184 -2.1042 NaN
-0.2479 4.1092 3.9808 -0.7376 2.7353 -0.1072 5.1904 -0.0066 4.0126 NaN

>> stats.tstat

ans =

Columns 1 through 10

0.0954 1.0092 -1.7746 -1.0092 1.6708 1.8395 -0.7491 0 1.4126 -0.4788

Columns 11 through 20

-0.7139 -1.1764 -1.8238 -0.3698 -0.4933 -1.5291 -0.8636 -1.2739 -0.2795 -0.9681

Columns 21 through 30

-0.9650 0.0274 -1.1563 -0.7760 -0.9458 1.7469 NaN -1.6120 -1.6529 -1.9129

Columns 31 through 40

-3.0949 -0.0262 3.0944 -3.2050 3.2039 -2.8132 -3.7771 -3.8559 -1.9889 3.5274

Columns 41 through 50

1.0412 -1.2426 0.6158 -1.4008 1.4017 -1.7272 -1.2683 -0.9291 -3.1405 1.4359

Columns 51 through 60

-2.4157 1.2624 0.6109 -3.5993 0.1712 -2.2096 2.1618 -1.9942 0.6170 NaN

>> stats.df

ans =

Columns 1 through 10

96.5392 141.9222 120.6220 141.9222 126.7546 136.6986 137.1397 138.3477 132.1104 137.6065

Columns 11 through 20

140.8273 86.0743 84.1477 141.1442 140.8087 100.9322 140.6920 136.0255 141.7779 141.6388

Columns 21 through 30

136.7940 141.2808 99.1256 141.9121 120.4726 141.6542 NaN 132.3857 114.3362 138.5026

Columns 31 through 40

115.8660 136.1832 115.8684 113.4237 113.4309 120.3204 85.7753 83.2255 138.1121 100.5406

Columns 41 through 50

130.8821 125.2382 135.7337 135.7801 135.7802 132.1223 140.9682 109.4827 86.5195 140.5598

Columns 51 through 60

88.5999 141.2084 124.0862 79.0405 141.3494 134.3209 141.2108 126.0191 135.6402 NaN

>> stats.sd

ans =

Columns 1 through 10

0.4537	22.0643	101.5699	22.0643	1.2496	10.8311	1.4031	1.0436	1.1062	90.3244
0.1957	22.5871	159.1171	22.5871	1.7944	13.2230	1.6976	1.2294	1.4647	75.3982

Columns 11 through 20

14.1988	0.2008	231.6426	20.8214	1.7654	7.9266	1.7178	17.7214	1.4608	1.6763
15.5594	0.6127	757.9703	19.2585	1.6098	16.8577	1.5594	21.9223	1.5198	1.5936

Columns 21 through 30

1.5105	2.9260	6.7129	143.3904	1.2720	24.3441	0	2.6953	2.4833	12.1299
1.2397	3.1428	14.7719	139.8654	1.9969	25.5780	0	3.5531	4.2551	14.2384

Columns 31 through 40

9.8493	18.1031	9.8473	8.9053	8.9053	0.1775	3.0382	2.7287	6.4866	11.3383
16.5075	22.3266	16.5035	15.4643	15.4627	0.2793	9.3669	9.2648	7.6838	24.2890

Columns 41 through 50

6.0433	6.1148	3.6690	8.5015	8.5015	16.1583	28.4501	8.8576	1.1666	7.6255
8.1588	8.9740	2.9496	10.5660	10.5660	21.3916	30.9977	16.3218	3.5074	8.4407

Columns 51 through 60

1.6412	7.3209	7.2612	0.9018	7.3762	2.4213	7.2380	2.0823	8.2132	NaN
4.6252	7.8912	10.8325	3.7838	7.8949	3.0899	7.8009	3.0219	10.2345	NaN

>> hr

hr =

Columns 1 through 18

0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Columns 19 through 36

0	0	0	0	0	0	0	1	NaN	0	0	0	0	0	1	0	1	0
---	---	---	---	---	---	---	---	-----	---	---	---	---	---	---	---	---	---

Columns 37 through 54

0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Columns 55 through 60

```
0 0 1 0 0 NaN
```

```
>> pr
```

```
pr =
```

```
Columns 1 through 10
```

```
0.4621 0.1573 0.9608 0.8427 0.0486 0.0340 0.7725 0.5000 0.0801 0.6836
```

```
Columns 11 through 20
```

```
0.7618 0.8787 0.9641 0.6440 0.6887 0.9353 0.8054 0.8976 0.6099 0.8327
```

```
Columns 21 through 30
```

```
0.8319 0.4891 0.8748 0.7805 0.8269 0.0414 NaN 0.9453 0.9495 0.9711
```

```
Columns 31 through 40
```

```
0.9988 0.5104 0.0012 0.9991 0.0009 0.9971 0.9999 0.9999 0.9757 0.0003
```

```
Columns 41 through 50
```

```
0.1499 0.8918 0.2695 0.9182 0.0816 0.9568 0.8966 0.8226 0.9988 0.0766
```

```
Columns 51 through 60
```

```
0.9911 0.1045 0.2712 0.9997 0.4321 0.9856 0.0162 0.9759 0.2691 NaN
```

```
>> cir
```

```
cir =
```

```
Columns 1 through 10
```

```
-0.0912 -2.4055 -76.3553 -9.9166 0.0036 0.3696 -0.6243 -0.3147 -0.0528 -29.6012  
Inf Inf Inf Inf Inf Inf Inf Inf Inf Inf
```

```
Columns 11 through 20
```

```
-5.8825 -0.2157 -325.7051 -6.7704 -0.6051 -7.0015 -0.6888 -9.7338 -0.4808 -0.7152  
Inf Inf Inf Inf Inf Inf Inf Inf Inf Inf
```

```
Columns 21 through 30
```

```
-0.6036 -0.8240 -5.3861 -57.4038 -0.7264 0.3794 NaN -1.7178 -1.9226 -7.8669  
Inf Inf Inf Inf Inf Inf Inf Inf Inf Inf
```

```
Columns 31 through 40
```

```
-10.7674 -5.6990 3.2529 -10.2280 3.2500 -0.1744 -6.3131 -6.2822 -4.3194 5.8986
Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf
```

Columns 41 through 50

```
-0.7364 -3.7110 -0.5772 -4.8858 -0.4067 -10.6904 -14.4989 -5.6639 -2.0923 -0.2947
Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf
```

Columns 51 through 60

```
-2.3586 -0.4990 -1.6081 -2.4130 -1.8902 -1.7885 0.6347 -1.5792 -1.6071      NaN
Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf
```

>> statsr.tstat

ans =

Columns 1 through 10

```
0.0954 1.0092 -1.7746 -1.0092 1.6708 1.8395 -0.7491      0 1.4126 -0.4788
```

Columns 11 through 20

```
-0.7139 -1.1764 -1.8238 -0.3698 -0.4933 -1.5291 -0.8636 -1.2739 -0.2795 -0.9681
```

Columns 21 through 30

```
-0.9650 0.0274 -1.1563 -0.7760 -0.9458 1.7469      NaN -1.6120 -1.6529 -1.9129
```

Columns 31 through 40

```
-3.0949 -0.0262 3.0944 -3.2050 3.2039 -2.8132 -3.7771 -3.8559 -1.9889 3.5274
```

Columns 41 through 50

```
1.0412 -1.2426 0.6158 -1.4008 1.4017 -1.7272 -1.2683 -0.9291 -3.1405 1.4359
```

Columns 51 through 60

```
-2.4157 1.2624 0.6109 -3.5993 0.1712 -2.2096 2.1618 -1.9942 0.6170      NaN
```

>> statsr.df

ans =

Columns 1 through 10

```
96.5392 141.9222 120.6220 141.9222 126.7546 136.6986 137.1397 138.3477 132.1104 137.6065
```

Columns 11 through 20

140.8273 86.0743 84.1477 141.1442 140.8087 100.9322 140.6920 136.0255 141.7779 141.6388

Columns 21 through 30

136.7940 141.2808 99.1256 141.9121 120.4726 141.6542 NaN 132.3857 114.3362 138.5026

Columns 31 through 40

115.8660 136.1832 115.8684 113.4237 113.4309 120.3204 85.7753 83.2255 138.1121 100.5406

Columns 41 through 50

130.8821 125.2382 135.7337 135.7801 135.7802 132.1223 140.9682 109.4827 86.5195 140.5598

Columns 51 through 60

88.5999 141.2084 124.0862 79.0405 141.3494 134.3209 141.2108 126.0191 135.6402 NaN

>> statsr.sd

ans =

Columns 1 through 10

0.4537	22.0643	101.5699	22.0643	1.2496	10.8311	1.4031	1.0436	1.1062	90.3244
0.1957	22.5871	159.1171	22.5871	1.7944	13.2230	1.6976	1.2294	1.4647	75.3982

Columns 11 through 20

14.1988	0.2008	231.6426	20.8214	1.7654	7.9266	1.7178	17.7214	1.4608	1.6763
15.5594	0.6127	757.9703	19.2585	1.6098	16.8577	1.5594	21.9223	1.5198	1.5936

Columns 21 through 30

1.5105	2.9260	6.7129	143.3904	1.2720	24.3441	0	2.6953	2.4833	12.1299
1.2397	3.1428	14.7719	139.8654	1.9969	25.5780	0	3.5531	4.2551	14.2384

Columns 31 through 40

9.8493	18.1031	9.8473	8.9053	8.9053	0.1775	3.0382	2.7287	6.4866	11.3383
16.5075	22.3266	16.5035	15.4643	15.4627	0.2793	9.3669	9.2648	7.6838	24.2890

Columns 41 through 50

6.0433	6.1148	3.6690	8.5015	8.5015	16.1583	28.4501	8.8576	1.1666	7.6255
8.1588	8.9740	2.9496	10.5660	10.5660	21.3916	30.9977	16.3218	3.5074	8.4407

Columns 51 through 60

```
1.6412 7.3209 7.2612 0.9018 7.3762 2.4213 7.2380 2.0823 8.2132      NaN  
4.6252 7.8912 10.8325 3.7838 7.8949 3.0899 7.8009 3.0219 10.2345      NaN
```

>> hl

hl =

Columns 1 through 18

```
0 0 1 0 0 0 0 0 0 0 0 1 0 0 0 0 0
```

Columns 19 through 36

```
0 0 0 0 0 0 0 NaN 0 0 1 1 0 0 1 0 1
```

Columns 37 through 54

```
1 1 1 0 0 0 0 0 1 0 0 1 0 1 0 0 1
```

Columns 55 through 60

```
0 1 0 1 0 NaN
```

>> pl

pl =

Columns 1 through 10

```
0.5379 0.8427 0.0392 0.1573 0.9514 0.9660 0.2275 0.5000 0.9199 0.3164
```

Columns 11 through 20

```
0.2382 0.1213 0.0359 0.3560 0.3113 0.0647 0.1946 0.1024 0.3901 0.1673
```

Columns 21 through 30

```
0.1681 0.5109 0.1252 0.2195 0.1731 0.9586      NaN 0.0547 0.0505 0.0289
```

Columns 31 through 40

```
0.0012 0.4896 0.9988 0.0009 0.9991 0.0029 0.0001 0.0001 0.0243 0.9997
```

Columns 41 through 50

```
0.8501 0.1082 0.7305 0.0818 0.9184 0.0432 0.1034 0.1774 0.0012 0.9234
```

Columns 51 through 60

```
0.0089  0.8955  0.7288  0.0003  0.5679  0.0144  0.9838  0.0241  0.7309      NaN
```

```
>> cil
```

```
cil =
```

```
Columns 1 through 10
```

-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
0.1023	9.9166	-2.6030	2.4055	0.8576	7.0416	0.2354	0.3147	0.6639	16.3234

```
Columns 11 through 20
```

-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
2.3381	0.0370	-15.0060	4.2982	0.3273	0.2876	0.2166	1.2700	0.3419	0.1874

```
Columns 21 through 30
```

-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
0.1592	0.8518	0.9639	20.7649	0.1986	14.1595	NaN	0.0234	0.0031	-0.5664

```
Columns 31 through 40
```

-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
-3.2548	5.5212	10.7638	-3.2525	10.2250	-0.0451	-2.4536	-2.4956	-0.3945	16.3875

```
Columns 41 through 50
```

-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
3.2280	0.5304	1.2605	0.4080	4.8872	-0.2235	1.9211	1.5972	-0.6438	4.1447

```
Columns 51 through 60
```

-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf	-Inf
-0.4358	3.7018	3.4859	-0.8870	2.3263	-0.2560	4.7876	-0.1458	3.5154	NaN

```
>> statsl.tstat
```

```
ans =
```

```
Columns 1 through 10
```

0.0954	1.0092	-1.7746	-1.0092	1.6708	1.8395	-0.7491	0	1.4126	-0.4788
--------	--------	---------	---------	--------	--------	---------	---	--------	---------

```
Columns 11 through 20
```

-0.7139	-1.1764	-1.8238	-0.3698	-0.4933	-1.5291	-0.8636	-1.2739	-0.2795	-0.9681
---------	---------	---------	---------	---------	---------	---------	---------	---------	---------

```
Columns 21 through 30
```

-0.9650 0.0274 -1.1563 -0.7760 -0.9458 1.7469 NaN -1.6120 -1.6529 -1.9129

Columns 31 through 40

-3.0949 -0.0262 3.0944 -3.2050 3.2039 -2.8132 -3.7771 -3.8559 -1.9889 3.5274

Columns 41 through 50

1.0412 -1.2426 0.6158 -1.4008 1.4017 -1.7272 -1.2683 -0.9291 -3.1405 1.4359

Columns 51 through 60

-2.4157 1.2624 0.6109 -3.5993 0.1712 -2.2096 2.1618 -1.9942 0.6170 NaN

>> stats1.df

ans =

Columns 1 through 10

96.5392 141.9222 120.6220 141.9222 126.7546 136.6986 137.1397 138.3477 132.1104 137.6065

Columns 11 through 20

140.8273 86.0743 84.1477 141.1442 140.8087 100.9322 140.6920 136.0255 141.7779 141.6388

Columns 21 through 30

136.7940 141.2808 99.1256 141.9121 120.4726 141.6542 NaN 132.3857 114.3362 138.5026

Columns 31 through 40

115.8660 136.1832 115.8684 113.4237 113.4309 120.3204 85.7753 83.2255 138.1121 100.5406

Columns 41 through 50

130.8821 125.2382 135.7337 135.7801 135.7802 132.1223 140.9682 109.4827 86.5195 140.5598

Columns 51 through 60

88.5999 141.2084 124.0862 79.0405 141.3494 134.3209 141.2108 126.0191 135.6402 NaN

>> sd

Undefined function or variable 'sd'.

>> stats1.sd

ans =

Columns 1 through 10

0.4537	22.0643	101.5699	22.0643	1.2496	10.8311	1.4031	1.0436	1.1062	90.3244
0.1957	22.5871	159.1171	22.5871	1.7944	13.2230	1.6976	1.2294	1.4647	75.3982

Columns 11 through 20

14.1988	0.2008	231.6426	20.8214	1.7654	7.9266	1.7178	17.7214	1.4608	1.6763
15.5594	0.6127	757.9703	19.2585	1.6098	16.8577	1.5594	21.9223	1.5198	1.5936

Columns 21 through 30

1.5105	2.9260	6.7129	143.3904	1.2720	24.3441	0	2.6953	2.4833	12.1299
1.2397	3.1428	14.7719	139.8654	1.9969	25.5780	0	3.5531	4.2551	14.2384

Columns 31 through 40

9.8493	18.1031	9.8473	8.9053	8.9053	0.1775	3.0382	2.7287	6.4866	11.3383
16.5075	22.3266	16.5035	15.4643	15.4627	0.2793	9.3669	9.2648	7.6838	24.2890

Columns 41 through 50

6.0433	6.1148	3.6690	8.5015	8.5015	16.1583	28.4501	8.8576	1.1666	7.6255
8.1588	8.9740	2.9496	10.5660	10.5660	21.3916	30.9977	16.3218	3.5074	8.4407

Columns 51 through 60

1.6412	7.3209	7.2612	0.9018	7.3762	2.4213	7.2380	2.0823	8.2132	NaN
4.6252	7.8912	10.8325	3.7838	7.8949	3.0899	7.8009	3.0219	10.2345	NaN

>> d

d =

Columns 1 through 10

0.0159 0.1682 -0.2958 -0.1682 0.2785 0.3066 -0.1249 0 0.2354 -0.0798

Columns 11 through 20

-0.1190 -0.1961 -0.3040 -0.0616 -0.0822 -0.2549 -0.1439 -0.2123 -0.0466 -0.1614

Columns 21 through 30

-0.1608 0.0046 -0.1927 -0.1293 -0.1576 0.2911 NaN -0.2687 -0.2755 -0.3188

Columns 31 through 40

-0.5158 -0.0044 0.5157 -0.5342 0.5340 -0.4689 -0.6295 -0.6426 -0.3315 0.5879

Columns 41 through 50

0.1735 -0.2071 0.1026 -0.2335 0.2336 -0.2879 -0.2114 -0.1548 -0.5234 0.2393

Columns 51 through 59

-0.4026 0.2104 0.1018 -0.5999 0.0285 -0.3683 0.3603 -0.3324 0.1028

>>

Young Professionals vs. Old Professionals

Y =

Columns 1 through 10

1.0451 77.5141 269.8521 22.4859 6.4648 37.5887 1.8451 8.4366 6.0000 274.7746

Columns 11 through 20

32.8732 0.4201 319.0437 55.9859 3.3239 17.0873 3.4507 48.7676 2.1268 5.2817

Columns 21 through 30

3.5352 3.8732 28.4817 524.1690 2.4085 49.2704 1.0000 5.9859 8.6944 23.4042

Columns 31 through 40

26.3718 39.4028 73.6296 22.8268 77.1746 0.3803 14.5451 14.2225 8.2845 62.9521

Columns 41 through 50

48.6042 48.2493 3.1521 14.1944 85.8070 14.2789 66.8915 15.9338 3.2775 10.5451

Columns 51 through 60

4.8113 12.5099 7.0817 4.6465 14.1042 3.9394 9.3296 3.9845 9.8338 NaN

>> O

O =

Columns 1 through 10

0.9431 73.9917 312.7681 26.0083 6.5972 36.1611 2.3472 9.0139 6.3750 179.0139

Columns 11 through 20

35.1931 0.3837 343.7833 55.6389 3.2639 17.2389 3.3194 49.0708 1.8611 5.1528

Columns 21 through 30

3.3472 4.2361 27.5778 340.3611 2.8472 45.9764 1.0000 6.8056 6.6833 28.3625

Columns 31 through 40

31.6764 39.9042 68.3236 28.8194 71.1806 0.4792 15.0333 14.7139 13.7764 56.4639

Columns 41 through 50

47.7389 48.4597 3.7944 15.0194 84.9653 16.4403 68.4153 16.6458 4.5792 9.9958

Columns 51 through 60

5.0194 8.8778 10.6056 5.1472 11.7611 5.7806 10.1764 5.8375 5.5597 NaN

>> h

h =

Columns 1 through 18

0 0 0 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0

Columns 19 through 36

0 0 0 0 0 0 0 0 NaN 0 0 0 0 0 0 0 0 0 0

Columns 37 through 54

0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 1 1 0

Columns 55 through 60

0 0 0 0 1 NaN

>> p

p =

Columns 1 through 10

0.5897 0.2443 0.0555 0.2443 0.6412 0.4145 0.0295 0.0030 0.0867 0.3416

Columns 11 through 20

0.4797 0.5305 0.7688 0.8607 0.7331 0.9313 0.4409 0.9006 0.0780 0.4935

Columns 21 through 30

0.1431 0.5385 0.6941 0.3448 0.0610 0.3712 NaN 0.2098 0.3715 0.1942

Columns 31 through 40

0.0954 0.8897 0.0953 0.0895 0.0894 0.2832 0.7879 0.7833 0.0345 0.1883

Columns 41 through 50

0.1864 0.7677 0.2134 0.6316 0.6248 0.3387 0.7476 0.7726 0.1462 0.7029

Columns 51 through 60

0.8652 0.0360 0.0230 0.6382 0.1763 0.0860 0.5686 0.0918 0.0002 NaN

>> ci

ci =

Columns 1 through 10

-0.2725 -2.4339 -86.8487 -9.4787 -0.6934 -2.0212 -0.9536 -0.9554 -0.8048 -103.5253
0.4766 9.4787 1.0168 2.4339 0.4285 4.8764 -0.0507 -0.1992 0.0548 295.0468

Columns 11 through 20

-8.7914 -0.0781 -190.7883 -3.5545 -0.2874 -3.6197 -0.2045 -5.0960 -0.0302 -0.2423
4.1518 0.1509 141.3090 4.2486 0.4076 3.3166 0.4670 4.4895 0.5615 0.5002

Columns 21 through 30

-0.0644 -1.5263 -3.6342 -201.2604 -0.8980 -3.9682 NaN -2.1059 -2.4401 -12.4723
0.4404 0.8006 5.4420 568.8762 0.0205 10.5562 NaN 0.4666 6.4621 2.5558

Columns 31 through 40

-11.5516 -7.6333 -0.9413 -12.9228 -0.9358 -0.2806 -4.0687 -4.0171 -10.5746 -3.2143
0.9424 6.6306 11.5532 0.9374 12.9239 0.0828 3.0922 3.0344 -0.4092 16.1907

Columns 41 through 50

-0.4229 -1.6158 -1.6590 -4.2192 -2.5536 -6.6122 -10.8672 -5.5751 -3.0631 -2.2917
2.1536 1.1950 0.3743 2.5690 4.2371 2.2894 7.8197 4.1511 0.4597 3.3902

Columns 51 through 60

-2.6290 0.2426 -6.5532 -2.6031 -1.0660 -3.9465 -3.7781 -4.0118 2.0692 NaN
2.2126 7.0216 -0.4945 1.6016 5.7522 0.2642 2.0844 0.3058 6.4790 NaN

>> stats.tstat

ans =

Columns 1 through 10

0.5411 1.1692 -1.9313 -1.1692 -0.4670 0.8184 -2.2021 -3.0182 -1.7255 0.9570

Columns 11 through 20

-0.7087 0.6291 -0.2945 0.1759 0.3417 -0.0864 0.7729 -0.1251 1.7757 0.6865

Columns 21 through 30

1.4728 -0.6167 0.3942 0.9507 -1.8889 0.8973 NaN -1.2600 0.8985 -1.3046

Columns 31 through 40

-1.6796 -0.1390 1.6799 -1.7109 1.7113 -1.0784 -0.2696 -0.2755 -2.1429 1.3223

Columns 41 through 50

1.3279 -0.2960 -1.2507 -0.4806 0.4901 -0.9601 -0.3224 -0.2896 -1.4617 0.3822

Columns 51 through 60

-0.1700 2.1255 -2.3008 -0.4713 1.3594 -1.7299 -0.5715 -1.6988 3.8385 NaN

>> stats.df

ans =

Columns 1 through 10

89.5567 140.0054 139.5649 140.0054 130.4820 140.9731 121.9909 140.9892 134.1421 76.0069

Columns 11 through 20

140.5193 120.3337 140.9618 138.9772 139.7275 140.6764 139.8811 138.8351 134.0762 140.7933

Columns 21 through 30

138.4787 138.6310 124.6238 75.9916 139.0266 131.4480 NaN 137.1971 83.9158 140.3779

Columns 31 through 40

133.0732 140.7312 133.0795 129.3435 129.3371 109.6405 140.9657 140.8825 103.1063 137.9732

Columns 41 through 50

140.9296 140.9582 122.7641 140.6904 140.6798 139.9575 140.7582 135.4588 133.7094 140.3960

Columns 51 through 60

137.7128 101.5465 133.5481 128.4206 133.7326 131.9019 130.0433 124.8240 118.4207 NaN

>> stats.sd

ans =

1.0e+03 *

Columns 1 through 10

0.0015	0.0171	0.1250	0.0171	0.0014	0.0103	0.0011	0.0011	0.0011	0.8256
0.0006	0.0189	0.1404	0.0189	0.0019	0.0106	0.0016	0.0012	0.0014	0.1723

Columns 11 through 20

0.0189	0.0004	0.4945	0.0124	0.0011	0.0102	0.0011	0.0153	0.0010	0.0011
0.0203	0.0003	0.5099	0.0111	0.0010	0.0108	0.0010	0.0137	0.0008	0.0011

Columns 21 through 30

0.0008	0.0033	0.0159	1.5953	0.0013	0.0246	0	0.0035	0.0180	0.0218
0.0007	0.0038	0.0110	0.3326	0.0015	0.0189	0	0.0042	0.0057	0.0236

Columns 31 through 40

0.0163	0.0209	0.0163	0.0174	0.0174	0.0004	0.0107	0.0104	0.0095	0.0269
0.0212	0.0222	0.0212	0.0240	0.0240	0.0007	0.0110	0.0109	0.0195	0.0316

Columns 41 through 50

0.0038	0.0042	0.0024	0.0099	0.0099	0.0128	0.0286	0.0160	0.0046	0.0082
0.0040	0.0043	0.0036	0.0106	0.0106	0.0141	0.0279	0.0132	0.0060	0.0089

Columns 51 through 60

0.0078	0.0129	0.0079	0.0052	0.0114	0.0054	0.0074	0.0052	0.0079	NaN
0.0068	0.0064	0.0102	0.0073	0.0091	0.0072	0.0101	0.0077	0.0050	NaN

>> hr

hr =

Columns 1 through 18

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Columns 19 through 36

1	0	0	0	0	0	0	NaN	0	0	0	0	0	1	0	1	0	0
---	---	---	---	---	---	---	-----	---	---	---	---	---	---	---	---	---	---

Columns 37 through 54

0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Columns 55 through 60

```
0 0 0 0 1 NaN
```

```
>> pr
```

```
pr =
```

```
Columns 1 through 10
```

```
0.2949 0.1222 0.9723 0.8778 0.6794 0.2073 0.9852 0.9985 0.9566 0.1708
```

```
Columns 11 through 20
```

```
0.7601 0.2652 0.6156 0.4303 0.3666 0.5344 0.2205 0.5497 0.0390 0.2468
```

```
Columns 21 through 30
```

```
0.0715 0.7308 0.3470 0.1724 0.9695 0.1856 NaN 0.8951 0.1858 0.9029
```

```
Columns 31 through 40
```

```
0.9523 0.5552 0.0477 0.9552 0.0447 0.8584 0.6061 0.6083 0.9828 0.0941
```

```
Columns 41 through 50
```

```
0.0932 0.6162 0.8933 0.6842 0.3124 0.8307 0.6262 0.6137 0.9269 0.3514
```

```
Columns 51 through 60
```

```
0.5674 0.0180 0.9885 0.6809 0.0882 0.9570 0.7157 0.9541 0.0001 NaN
```

```
>> cir
```

```
cir =
```

```
Columns 1 through 10
```

```
-0.2113 -1.4661 -79.7100 -8.5109 -0.6022 -1.4608 -0.8801 -0.8940 -0.7350 -70.8538  
Inf Inf Inf Inf Inf Inf Inf Inf Inf Inf
```

```
Columns 11 through 20
```

```
-7.7399 -0.0595 -163.8097 -2.9205 -0.2310 -3.0562 -0.1500 -4.3171 0.0179 -0.1820  
Inf Inf Inf Inf Inf Inf Inf Inf Inf Inf
```

```
Columns 21 through 30
```

```
-0.0234 -1.3373 -2.8958 -138.1309 -0.8234 -2.7874 NaN -1.8969 -1.7117 -11.2514  
Inf Inf Inf Inf Inf Inf Inf Inf Inf Inf
```

```
Columns 31 through 40
```

```
-10.5359 -6.4745  0.0744 -11.7957  0.1912 -0.2510 -3.4870 -3.4443 -9.7456 -1.6375
Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf
```

Columns 41 through 50

```
-0.2136 -1.3875 -1.4935 -3.6677 -2.0019 -5.8890 -9.3491 -4.7847 -2.7767 -1.8301
Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf
```

Columns 51 through 60

```
-2.2356  0.7955 -6.0607 -2.2612 -0.5118 -3.6041 -3.3014 -3.6605  2.4281      NaN
Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf     Inf
```

>> statsr.tstat

ans =

Columns 1 through 10

```
0.5411  1.1692 -1.9313 -1.1692 -0.4670  0.8184 -2.2021 -3.0182 -1.7255  0.9570
```

Columns 11 through 20

```
-0.7087  0.6291 -0.2945  0.1759  0.3417 -0.0864  0.7729 -0.1251  1.7757  0.6865
```

Columns 21 through 30

```
1.4728 -0.6167  0.3942  0.9507 -1.8889  0.8973      NaN -1.2600  0.8985 -1.3046
```

Columns 31 through 40

```
-1.6796 -0.1390  1.6799 -1.7109  1.7113 -1.0784 -0.2696 -0.2755 -2.1429  1.3223
```

Columns 41 through 50

```
1.3279 -0.2960 -1.2507 -0.4806  0.4901 -0.9601 -0.3224 -0.2896 -1.4617  0.3822
```

Columns 51 through 60

```
-0.1700  2.1255 -2.3008 -0.4713  1.3594 -1.7299 -0.5715 -1.6988  3.8385      NaN
```

>> statsr.df

ans =

Columns 1 through 10

```
89.5567 140.0054 139.5649 140.0054 130.4820 140.9731 121.9909 140.9892 134.1421 76.0069
```

Columns 11 through 20

140.5193 120.3337 140.9618 138.9772 139.7275 140.6764 139.8811 138.8351 134.0762 140.7933

Columns 21 through 30

138.4787 138.6310 124.6238 75.9916 139.0266 131.4480 NaN 137.1971 83.9158 140.3779

Columns 31 through 40

133.0732 140.7312 133.0795 129.3435 129.3371 109.6405 140.9657 140.8825 103.1063 137.9732

Columns 41 through 50

140.9296 140.9582 122.7641 140.6904 140.6798 139.9575 140.7582 135.4588 133.7094 140.3960

Columns 51 through 60

137.7128 101.5465 133.5481 128.4206 133.7326 131.9019 130.0433 124.8240 118.4207 NaN

>> statsr.sd

ans =

1.0e+03 *

Columns 1 through 10

0.0015	0.0171	0.1250	0.0171	0.0014	0.0103	0.0011	0.0011	0.0011	0.8256
0.0006	0.0189	0.1404	0.0189	0.0019	0.0106	0.0016	0.0012	0.0014	0.1723

Columns 11 through 20

0.0189	0.0004	0.4945	0.0124	0.0011	0.0102	0.0011	0.0153	0.0010	0.0011
0.0203	0.0003	0.5099	0.0111	0.0010	0.0108	0.0010	0.0137	0.0008	0.0011

Columns 21 through 30

0.0008	0.0033	0.0159	1.5953	0.0013	0.0246	0	0.0035	0.0180	0.0218
0.0007	0.0038	0.0110	0.3326	0.0015	0.0189	0	0.0042	0.0057	0.0236

Columns 31 through 40

0.0163	0.0209	0.0163	0.0174	0.0174	0.0004	0.0107	0.0104	0.0095	0.0269
0.0212	0.0222	0.0212	0.0240	0.0240	0.0007	0.0110	0.0109	0.0195	0.0316

Columns 41 through 50

0.0038	0.0042	0.0024	0.0099	0.0099	0.0128	0.0286	0.0160	0.0046	0.0082
0.0040	0.0043	0.0036	0.0106	0.0106	0.0141	0.0279	0.0132	0.0060	0.0089

Columns 51 through 60

0.0078	0.0129	0.0079	0.0052	0.0114	0.0054	0.0074	0.0052	0.0079	NaN
0.0068	0.0064	0.0102	0.0073	0.0091	0.0072	0.0101	0.0077	0.0050	NaN

>> hl

hl =

Columns 1 through 18

0	0	1	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Columns 19 through 36

0	0	0	0	0	0	1	0	NaN	0	0	0	1	0	0	1	0	0
---	---	---	---	---	---	---	---	-----	---	---	---	---	---	---	---	---	---

Columns 37 through 54

0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Columns 55 through 60

0	1	0	1	0	NaN
---	---	---	---	---	-----

>> pl

pl =

Columns 1 through 10

0.7051	0.8778	0.0277	0.1222	0.3206	0.7927	0.0148	0.0015	0.0434	0.8292
--------	--------	--------	--------	--------	--------	--------	--------	--------	--------

Columns 11 through 20

0.2399	0.7348	0.3844	0.5697	0.6334	0.4656	0.7795	0.4503	0.9610	0.7532
--------	--------	--------	--------	--------	--------	--------	--------	--------	--------

Columns 21 through 30

0.9285	0.2692	0.6530	0.8276	0.0305	0.8144	NaN	0.1049	0.8142	0.0971
--------	--------	--------	--------	--------	--------	-----	--------	--------	--------

Columns 31 through 40

0.0477	0.4448	0.9523	0.0448	0.9553	0.1416	0.3939	0.3917	0.0172	0.9059
--------	--------	--------	--------	--------	--------	--------	--------	--------	--------

Columns 41 through 50

0.9068	0.3838	0.1067	0.3158	0.6876	0.1693	0.3738	0.3863	0.0731	0.6486
--------	--------	--------	--------	--------	--------	--------	--------	--------	--------

Columns 51 through 60

0.4326 0.9820 0.0115 0.3191 0.9118 0.0430 0.2843 0.0459 0.9999 NaN

>> cil

cil =

Columns 1 through 10

-Inf
0.4153 8.5109 -6.1219 1.4661 0.3373 4.3161 -0.1242 -0.2606 -0.0150 262.3753

Columns 11 through 20

-Inf
3.1003 0.1322 114.3304 3.6146 0.3511 2.7531 0.4125 3.7107 0.5134 0.4398

Columns 21 through 30

-Inf
0.3994 0.6115 4.7036 505.7467 -0.0541 9.3754 NaN 0.2576 5.7337 1.3349

Columns 31 through 40

-Inf
-0.0732 5.4718 10.5376 -0.1896 11.7969 0.0532 2.5105 2.4616 -1.2382 14.6139

Columns 41 through 50

-Inf
1.9443 0.9666 0.2089 2.0176 3.6854 1.5662 6.3016 3.3606 0.1733 2.9286

Columns 51 through 60

-Inf
1.8192 6.4686 -0.9870 1.2597 5.1980 -0.0781 1.6078 -0.0455 6.1200 NaN

>> stats1.tstat

ans =

Columns 1 through 10

0.5411 1.1692 -1.9313 -1.1692 -0.4670 0.8184 -2.2021 -3.0182 -1.7255 0.9570

Columns 11 through 20

-0.7087 0.6291 -0.2945 0.1759 0.3417 -0.0864 0.7729 -0.1251 1.7757 0.6865

Columns 21 through 30

1.4728 -0.6167 0.3942 0.9507 -1.8889 0.8973 NaN -1.2600 0.8985 -1.3046

Columns 31 through 40

-1.6796 -0.1390 1.6799 -1.7109 1.7113 -1.0784 -0.2696 -0.2755 -2.1429 1.3223

Columns 41 through 50

1.3279 -0.2960 -1.2507 -0.4806 0.4901 -0.9601 -0.3224 -0.2896 -1.4617 0.3822

Columns 51 through 60

-0.1700 2.1255 -2.3008 -0.4713 1.3594 -1.7299 -0.5715 -1.6988 3.8385 NaN

>> stats1.df

ans =

Columns 1 through 10

89.5567 140.0054 139.5649 140.0054 130.4820 140.9731 121.9909 140.9892 134.1421 76.0069

Columns 11 through 20

140.5193 120.3337 140.9618 138.9772 139.7275 140.6764 139.8811 138.8351 134.0762 140.7933

Columns 21 through 30

138.4787 138.6310 124.6238 75.9916 139.0266 131.4480 NaN 137.1971 83.9158 140.3779

Columns 31 through 40

133.0732 140.7312 133.0795 129.3435 129.3371 109.6405 140.9657 140.8825 103.1063 137.9732

Columns 41 through 50

140.9296 140.9582 122.7641 140.6904 140.6798 139.9575 140.7582 135.4588 133.7094 140.3960

Columns 51 through 60

137.7128 101.5465 133.5481 128.4206 133.7326 131.9019 130.0433 124.8240 118.4207 NaN

>> sd

Undefined function or variable 'sd'.

>> stats1.sd

ans =

1.0e+03 *

Columns 1 through 10

0.0015	0.0171	0.1250	0.0171	0.0014	0.0103	0.0011	0.0011	0.0011	0.8256
0.0006	0.0189	0.1404	0.0189	0.0019	0.0106	0.0016	0.0012	0.0014	0.1723

Columns 11 through 20

0.0189	0.0004	0.4945	0.0124	0.0011	0.0102	0.0011	0.0153	0.0010	0.0011
0.0203	0.0003	0.5099	0.0111	0.0010	0.0108	0.0010	0.0137	0.0008	0.0011

Columns 21 through 30

0.0008	0.0033	0.0159	1.5953	0.0013	0.0246	0	0.0035	0.0180	0.0218
0.0007	0.0038	0.0110	0.3326	0.0015	0.0189	0	0.0042	0.0057	0.0236

Columns 31 through 40

0.0163	0.0209	0.0163	0.0174	0.0174	0.0004	0.0107	0.0104	0.0095	0.0269
0.0212	0.0222	0.0212	0.0240	0.0240	0.0007	0.0110	0.0109	0.0195	0.0316

Columns 41 through 50

0.0038	0.0042	0.0024	0.0099	0.0099	0.0128	0.0286	0.0160	0.0046	0.0082
0.0040	0.0043	0.0036	0.0106	0.0106	0.0141	0.0279	0.0132	0.0060	0.0089

Columns 51 through 60

0.0078	0.0129	0.0079	0.0052	0.0114	0.0054	0.0074	0.0052	0.0079	NaN
0.0068	0.0064	0.0102	0.0073	0.0091	0.0072	0.0101	0.0077	0.0050	NaN

>> d

d =

Columns 1 through 10

0.0910 0.1954 -0.3228 -0.1954 -0.0780 0.1368 -0.3672 -0.5047 -0.2881 0.1611

Columns 11 through 20

-0.1185 0.1055 -0.0493 0.0294 0.0572 -0.0144 0.1293 -0.0209 0.2974 0.1148

Columns 21 through 30

0.2465 -0.1030 0.0661 0.1600 -0.3156 0.1503 NaN -0.2105 0.1511 -0.2181

Columns 31 through 40

-0.2804 -0.0232 0.2805 -0.2855 0.2856 -0.1797 -0.0451 -0.0461 -0.3568 0.2209

Columns 41 through 50

0.2220 -0.0495 -0.2086 -0.0803 0.0819 -0.1605 -0.0539 -0.0485 -0.2440 0.0639

Columns 51 through 59

-0.0285 0.3570 -0.3841 -0.0786 0.2277 -0.2888 -0.0954 -0.2834 0.6439

>>