

Panel A

	A	R	N	D	C	Q	E	G	H	I	L	K	M	F	P	S	T	W	Y	V
A	471	2415	2272	3172	10000	4705	184	9801	2209	9049	8586	5438	7827	10000	6169	7808	7874	10000	6394	3442
R	3112	2164	2756	6875	10000	8367	2722	2697	407	9158	10000	7051	6623	10000	2472	5203	10000	10000	10000	7185
N	8380	8692	10000	9013	10000	10000	2033	8935	7014	1130	9464	897	6121	7493	10000	6507	1475	10000	10000	8099
D	617	2388	7479	3282	10000	6763	4632	10000	7631	4245	4782	6468	7102	6517	10000	749	6940	10000	7306	688
C	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000
Q	9119	1996	8013	8705	10000	2826	2122	8727	1174	10000	9208	1021	5545	7010	2797	4439	2129	10000	10000	2271
E	4178	5368	1897	315	10000	4704	599	3945	4917	1375	8945	8809	7575	303	41	2953	8467	10000	5767	1102
G	10000	3538	8964	9295	10000	10000	6879	10000	2259	10000	3220	9476	10000	4169	8131	1879	10000	10000	1625	10000
H	2573	1664	5324	0	10000	18	3911	3928	675	7595	10000	10000	10000	1619	10000	3445	10000	10000	10000	2878
I	9100	8281	8907	7455	10000	5472	7894	8538	7935	7674	9645	1133	10000	8422	10000	1003	10000	10000	3723	8460
L	9894	4045	10000	9226	10000	6673	10000	5516	8663	8148	10000	9811	10000	10000	2690	7894	2071	10000	8197	2130
K	10000	10000	4039	8590	10000	10000	4156	2158	6353	8618	1634	8437	65	10000	5910	9615	938	10000	10000	4567
M	7748	10000	6147	424	10000	2073	7551	7228	2728	6611	7579	10000	10000	10000	5355	7196	1079	10000	4093	10000
F	334	1880	10000	6412	10000	4937	4695	4643	6166	8246	10000	8594	1065	589	10000	2645	6076	10000	3783	10000
P	1146	7891	5499	6198	10000	1507	4619	2257	5838	5435	8869	3216	5362	10000	6189	3734	2067	10000	10000	1828
S	5860	6082	1475	7706	10000	8808	389	2020	2784	9543	4172	7728	4725	2340	3476	2443	5092	10000	2657	5077
T	4616	1633	1246	9287	10000	10000	1583	9321	1988	7972	9619	3815	6523	3728	6011	8254	1293	10000	10000	2846
W	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000
Y	6416	2963	10000	10000	10000	10000	1233	5455	2324	7039	10000	10000	10000	10000	10000	2698	10000	10000	10000	10000
V	4249	4000	10000	338	10000	2023	320	2442	648	10000	4927	1923	7167	929	10000	6345	9482	10000	5849	10000

A,

	A	R	N	D	C	Q	E	G	H	I	L	K	M	F	P	S	T	W	Y	V
A	32	18	17	17	0	5	34	1	17	2	4	8	1	0	3	4	3	0	2	16
R	14	15	11	3	0	1	17	17	23	1	0	3	1	0	18	5	0	0	0	3
N	2	1	0	1	0	0	17	1	1	19	1	21	1	1	0	3	16	0	0	2
D	30	16	2	16	0	2	10	0	1	10	12	4	1	2	0	25	3	0	1	27
C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Q	1	12	1	1	0	4	14	1	15	0	1	19	1	1	5	4	10	0	0	12
E	14	5	18	32	0	4	27	13	3	22	3	2	1	26	36	15	2	0	2	25
G	0	12	1	1	0	0	4	0	15	0	20	1	0	5	1	21	0	0	16	0
H	12	15	2	41	0	31	5	4	20	1	0	0	0	10	0	5	0	0	0	6
I	2	2	1	3	0	3	3	2	1	2	1	21	0	1	0	21	0	0	3	2
L	1	12	0	2	0	3	0	9	1	3	0	1	0	0	14	4	20	0	1	20
K	0	0	6	2	0	0	11	20	2	2	22	2	25	0	3	1	21	0	0	9
M	1	0	1	20	0	3	1	1	2	1	1	0	0	0	1	1	11	0	1	0
F	28	14	0	2	0	2	4	4	1	1	0	1	9	21	0	10	2	0	2	0
P	22	1	2	2	0	12	4	19	1	3	1	7	1	0	1	6	14	0	0	17
S	7	4	19	3	0	1	29	21	8	1	12	3	2	11	6	15	5	0	5	7
T	8	18	19	1	0	0	21	1	11	2	1	9	1	4	2	2	18	0	0	13
W	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y	2	4	0	0	0	0	17	2	3	1	0	0	0	0	0	5	0	0	0	0
V	13	10	0	31	0	15	31	18	21	0	10	20	1	20	0	5	1	0	2	0

B,

Panel B

	A	R	N	D	C	Q	E	G	H	I	L	K	M	F	P	S	T	W	Y	V
A	136	1582	10000	2352	10000	6062	164	9678	560	7832	10000	9411	6345	10000	7947	7236	10000	10000	4874	1668
R	2188	10000	10000	10000	10000	10000	2357	2148	296	10000	10000	6566	5361	10000	1627	10000	10000	10000	10000	5568
N	8718	10000	10000	10000	10000	10000	10000	10000	4872	577	10000	5682	4833	10000	10000	7978	10000	10000	10000	6696
D	318	1730	10000	1958	10000	5046	2915	10000	5773	3293	3420	4942	10000	7258	10000	602	6890	10000	6122	2879
C	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000
Q	10000	1014	5964	10000	10000	1837	1160	10000	332	10000	10000	10000	10000	5560	2591	7194	6796	10000	10000	1412
E	3107	4408	10000	1777	10000	3452	224	6587	3917	1046	7818	8783	10000	894	381	2371	6931	10000	4273	588
G	10000	8809	8177	8839	10000	10000	5456	10000	908	10000	2825	10000	10000	4464	10000	1312	10000	10000	1351	10000
H	4109	771	5043	0	10000	484	2942	2356	825	5587	10000	10000	10000	799	10000	1905	10000	10000	10000	2053
I	8015	8885	10000	7970	10000	7368	6241	7611	7014	6002	9008	577	10000	10000	10000	457	10000	10000	10000	8570
L	9657	8308	10000	9633	10000	10000	10000	4507	7581	9026	10000	10000	10000	10000	6215	6668	1100	10000	10000	9308
K	10000	10000	4417	6995	10000	10000	7324	9369	4360	8923	8439	6728	23	10000	5064	8955	357	10000	10000	9105
M	6381	10000	10000	159	10000	1327	10000	10000	1782	5122	10000	10000	10000	10000	4062	10000	822	10000	10000	10000
F	10000	1491	10000	5335	10000	10000	3410	3949	10000	6424	10000	10000	589	4458	10000	1616	6931	10000	2139	10000
P	623	10000	6166	6912	10000	1136	5043	1921	4208	3487	7904	2247	3952	10000	4936	2662	4717	10000	10000	7626
S	7278	10000	10000	7617	10000	7426	94	1677	1813	10000	3272	7452	5768	1443	10000	1836	8654	10000	1859	3767
T	5322	1078	530	8788	10000	10000	742	9166	1082	8329	9107	10000	10000	3078	4736	8801	620	10000	10000	8646
W	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000
Y	6816	2229	10000	10000	10000	10000	581	10000	10000	5458	10000	10000	10000	10000	10000	1846	10000	10000	10000	10000
V	2607	4628	10000	119	10000	892	2473	10000	283	10000	8131	893	5679	10000	10000	5683	9015	10000	10000	10000

A,

	A	R	N	D	C	Q	E	G	H	I	L	K	M	F	P	S	T	W	Y	V
A	31	17	0	16	0	2	30	1	17	2	0	1	1	0	1	3	0	0	2	16
R	14	0	0	0	0	0	11	17	20	0	0	2	1	0	18	0	0	0	0	3
N	1	0	0	0	0	0	0	0	1	19	0	2	1	0	0	1	0	0	0	2
D	29	16	0	13	0	2	10	0	1	8	12	4	0	1	0	21	2	0	1	12
C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Q	0	12	1	0	0	3	12	0	14	0	0	0	0	1	3	1	1	0	0	11
E	12	4	0	14	0	3	25	3	2	19	3	1	0	17	20	11	2	0	2	22
G	0	1	1	1	0	0	4	0	15	0	20	0	0	4	0	19	0	0	16	0
H	2	12	1	41	0	12	3	4	4	1	0	0	0	9	0	4	0	0	0	4
I	2	1	0	2	0	1	3	2	1	2	1	21	0	0	0	21	0	0	0	1
L	1	2	0	1	0	0	0	9	1	1	0	0	0	0	2	4	20	0	0	1
K	0	0	3	2	0	0	2	1	2	1	2	2	23	0	3	1	21	0	0	1
M	1	0	0	20	0	3	0	0	2	1	0	0	0	0	1	0	10	0	0	0
F	0	14	0	2	0	0	4	3	0	1	0	0	9	1	0	10	1	0	2	0
P	21	0	1	1	0	9	2	19	1	3	1	6	1	0	1	6	2	0	0	1
S	3	0	0	2	0	1	29	19	5	0	11	2	1	11	0	13	1	0	5	6
T	4	17	19	1	0	0	19	1	11	1	1	0	0	3	2	1	18	0	0	1
W	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y	1	4	0	0	0	0	17	0	0	1	0	0	0	0	0	5	0	0	0	0
V	13	5	0	31	0	14	13	0	20	0	2	20	1	0	0	4	1	0	0	0

B,

Panel C

	A	R	N	D	C	Q	E	G	H	I	L	K	M	F	P	S	T	W	Y	V
A	569	2514	2805	3768	10000	5820	371	5431	2065	2824	6270	5132	4960	5149	7138	8924	1554	10000	7734	4721
R	4018	2408	3050	7302	10000	8623	2605	3110	416	9611	10000	7616	7472	10000	1999	5921	10000	10000	10000	8435
N	7447	8998	10000	9176	10000	10000	2099	9378	7345	1837	9344	1148	7123	8391	10000	7152	1879	10000	10000	3173
D	875	2570	7899	3205	10000	7151	4757	10000	7724	5141	5818	7030	7775	7390	10000	867	7568	10000	7742	1017
C	10000	10000	10000	10000	10000	10000	10000	6643	10000	4885	10000	10000	10000	10000	10000	10000	10000	10000	10000	7428
Q	9522	2257	8312	8896	10000	3169	2133	9217	943	10000	9662	1091	6445	7903	2666	5229	2576	10000	10000	3137
E	4860	5839	1930	445	10000	5147	733	4757	5076	1945	9485	9105	8107	452	67	3327	8908	10000	6281	1459
G	3868	4368	9414	9611	10000	10000	7780	3262	2359	4588	4473	9784	10000	5469	8670	2614	10000	10000	2040	425
H	2870	1582	5529	0	10000	38	3971	4598	472	8403	9040	10000	10000	1810	10000	3747	10000	10000	10000	3695
I	43	8290	9516	8429	3751	6955	8809	2395	8654	1794	9995	2083	8783	8791	10000	2100	2372	10000	4865	2358
L	9000	5523	10000	9667	10000	8035	10000	7283	9150	9244	9992	3550	23	10000	3515	5245	3008	10000	9319	4456
K	10000	10000	4667	8812	10000	10000	4493	2748	6658	9422	2699	8805	122	10000	6392	9747	1050	10000	10000	5951
M	1617	7599	6996	522	10000	2756	8244	6775	3311	7053	1142	10000	10000	3432	6195	8353	1567	10000	5548	731
F	2	2172	10000	7350	10000	5964	5627	6339	6774	5928	10000	6809	1445	899	10000	3616	1794	10000	5194	3477
P	1380	8083	6054	6684	10000	1663	4920	2358	6037	6623	9439	3621	6154	10000	6420	4151	2174	10000	4010	2348
S	7135	6873	1707	8128	6433	9126	526	2649	2955	9109	5947	8491	6300	3331	4049	3014	5222	10000	3459	6248
T	5472	1888	748	9536	10000	10000	1639	9748	2153	7917	572	4582	5754	5388	6717	8126	1758	10000	10000	230
W	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000
Y	7720	3610	10000	10000	10000	10000	1237	6872	2510	8666	10000	10000	10000	1258	10000	3615	10000	10000	10000	7464
V	4739	5171	10000	554	10000	2459	545	625	921	2465	7017	2479	821	10	10000	8180	9876	10000	2210	3497

A,

	A	R	N	D	C	Q	E	G	H	I	L	K	M	F	P	S	T	W	Y	V
A	35	20	17	17	0	5	34	16	17	23	17	13	4	8	3	4	24	0	2	19
R	14	15	11	3	0	1	17	17	23	1	0	3	1	0	18	5	0	0	0	3
N	4	1	0	1	0	0	17	1	1	19	2	21	1	1	0	3	16	0	0	15
D	30	16	2	16	0	2	10	0	1	10	12	4	1	2	0	25	3	0	1	27
C	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0	1
Q	1	12	1	1	0	4	14	1	15	0	1	19	1	1	7	4	10	0	0	12
E	14	5	18	32	0	4	27	13	3	22	3	2	1	26	36	15	2	0	2	25
G	21	12	1	1	0	0	4	21	15	17	23	1	0	6	1	21	0	0	16	36
H	12	15	2	41	0	31	5	4	20	1	1	0	0	10	0	5	0	0	0	6
I	38	3	1	3	3	3	3	24	1	24	1	21	1	2	0	21	19	0	4	24
L	7	12	0	2	0	3	0	11	1	5	1	20	34	0	14	15	21	0	1	22
K	0	0	6	2	0	0	11	20	2	2	22	2	25	0	3	1	22	0	0	9
M	15	1	1	20	0	3	1	2	2	2	20	0	0	3	1	1	11	0	1	20
F	40	15	0	2	0	2	4	4	1	5	0	3	10	21	0	10	17	0	2	14
P	22	1	2	2	0	12	4	19	1	3	1	7	1	0	1	6	14	0	2	17
S	7	4	19	3	1	1	29	21	8	3	13	3	2	11	6	15	7	0	5	9
T	10	18	22	1	0	0	21	1	11	4	32	9	2	4	2	3	18	0	0	33
W	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y	2	4	0	0	0	0	17	2	3	1	0	0	0	15	0	5	0	0	0	2
V	19	10	0	31	0	15	31	35	21	24	14	21	20	38	0	5	1	0	14	21

B,