

Results of Automatic Generator

1. TPC-H Query 3

(1) 1MB

row_num	o_orderkey	o_totalprice	o_orderdate	o_shippriority	annotation
276	1092	85552.21	1995-03-04 0	8006	
462	1830	85122.24	1995-02-23 0	7164	
517	2053	125125.57	1995-02-07 0	12143	
782	3110	115161.29	1994-12-17 0	2937	
958	3814	149451.88	1995-02-22 0	12594	
1038	4134	125191.12	1995-01-12 0	12116	
1059	4227	92261.08	1995-02-24 0	8724	
1142	4550	27461.48	1994-12-29 0	898	
1179	4707	61052.10	1995-02-27 0	5718	
1240	4960	153259.41	1995-02-26 0	11275	
1328	5312	66697.95	1995-02-24 0	6176	

Running time: 2014ms

Communication cost: 15.97 MB

(2) 3MB

row_num	o_orderkey	o_totalprice	o_orderdate	o_shippriority	annotation
232	928	263117.00	1995-03-02 0	255523	
254	998	77026.97	1994-11-26 0	14171	
321	1281	197926.09	1994-12-11 0	84846	
355	1411	192196.41	1994-12-21 0	109442	
530	2114	140412.70	1995-01-16 0	37113	
782	3110	130420.50	1994-12-17 0	32844	
866	3458	183403.91	1994-12-22 0	105892	
964	3844	8298.86	1994-12-29 0	5428	
1038	4134	152725.66	1995-01-12 0	147788	
1074	4290	32850.62	1995-01-15 0	31619	
1457	5825	29895.83	1995-02-21 0	28472	
1555	6211	131404.69	1994-11-24 0	37573	
1881	7521	97634.71	1995-02-28 0	93833	
1887	7527	72359.42	1994-12-12 0	11782	
2071	8263	113502.00	1995-01-27 0	105110	
2309	9221	230920.77	1995-01-04 0	170096	
2456	9824	176734.94	1995-01-23 0	32909	
2489	9953	16384.57	1995-02-28 0	2622	
2610	104344	9884.83	1994-12-24 0	39754	
2612	104363	7332.48	1995-01-03 0	35555	
2783	11111	87622.25	1995-01-18 0	41397	
3050	121944	6777.42	1995-03-02 0	45471	
3546	141781	1987.33	1995-01-01 0	11417	
3631	145031	60367.91	1995-02-06 0	154148	
3828	153001	55090.33	1995-02-09 0	94061	
4120	164802	38307.09	1994-12-07 0	40762	
4121	164815	5755.34	1995-02-19 0	51719	

4266	17058133829.25	1995-01-02	0	45132
4360	17440152569.11	1995-01-24	0	143161

Running time: 2771ms

Communication cost: 51.52 MB

(3) 10MB

row_num	o_orderkey	o_totalprice	o_orderdate	o_shippriority	annotation
95	359	214770.95	1994-12-19 0	6159	
462	1830	116412.14	1995-02-23 0	9900	
530	2114	159876.50	1995-01-16 0	4466	
782	3110	148021.34	1994-12-17 0	4498	
941	3749	134685.89	1995-02-24 0	12958	
958	3814	222423.91	1995-02-22 0	18494	
1111	4423	6952.95	1995-02-17 0	406	
1240	4960	204893.91	1995-02-26 0	15620	
1303	5191	156365.19	1994-12-11 0	7391	
1505	6017	144069.95	1995-01-31 0	9542	
1555	6211	147948.12	1994-11-24 0	4744	
1965	7845	197653.20	1994-12-14 0	7290	
2051	8195	203192.77	1995-01-07 0	9929	
2074	8290	128757.62	1994-12-10 0	6209	
2120	8480	261895.38	1995-01-30 0	11436	
2199	8775	62311.18	1995-02-04 0	5991	
2202	8802	108992.67	1995-02-01 0	8929	
2536	10144	235400.84	1995-01-03 0	4210	
2565	10245	268471.59	1995-02-14 0	22226	
2763	11043	102166.94	1995-02-20 0	7731	
2806	11206	209373.08	1994-12-29 0	7894	
2905	11617	186543.95	1994-12-11 0	13124	
3159	12615	20866.10	1995-03-06 0	1987	
3622	14470	140145.86	1995-01-25 0	7609	
3829	15301	169864.88	1994-12-27 0	5743	
3972	15876	99656.75	1995-01-25 0	6209	
4121	16481	77897.52	1995-02-19 0	7223	
4511	18023	60757.15	1995-02-25 0	5652	
4564	18244	95611.93	1995-02-12 0	9247	
4672	18688	273024.38	1995-03-06 0	19994	
4708	18820	168451.41	1995-02-12 0	15953	
4918	19654	125460.42	1995-01-10 0	8686	
5020	20068	134754.80	1995-03-01 0	8013	
5070	20262	218023.84	1994-12-27 0	14400	
5126	20486	210783.19	1995-03-06 0	20322	
5340	21348	22887.17	1995-03-11 0	2244	
5342	21350	27250.86	1995-02-25 0	2725	
5347	21379	190363.45	1995-01-15 0	8298	
5411	21635	67011.33	1994-12-03 0	1655	
5456	21824	29462.14	1995-02-08 0	2833	
5474	21890	117331.98	1995-01-25 0	3561	
5692	22756	237321.73	1994-12-25 0	8418	
5984	23936	301048.56	1994-12-18 0	10760	
6040	24160	58856.27	1995-02-02 0	5622	
6181	24709	14623.67	1995-01-16 0	1380	

6238	2493411569.89	1995-01-31	0	1112
6240	24960299406.41	1995-01-28	0	26780
6279	25095276231.12	1995-01-26	0	16005
6296	2518483850.59	1995-02-28	0	8181
6361	2544130402.99	1995-01-10	0	2815
6513	2604951331.76	1995-03-01	0	4909
6653	26597158793.58	1995-01-14	0	9195
6777	27105110309.78	1995-02-17	0	1972
6862	2743092684.00	1995-02-01	0	5270
6955	27811179863.52	1995-03-05	0	9661
6999	2797597036.00	1995-02-13	0	8319
7279	29095284979.69	1995-03-09	0	27652
7766	31046246364.20	1995-02-08	0	19499
7967	31847272673.38	1994-12-19	0	8752
8146	3257863264.41	1995-02-06	0	6025
8272	33088169986.59	1994-12-24	0	14705
8275	3309156302.99	1995-01-26	0	5213
8592	3436885541.60	1995-01-08	0	2187
8648	3459250781.48	1995-02-28	0	4836
8721	34881262557.62	1995-02-08	0	17279
8746	34978329225.84	1995-02-05	0	15038
8891	35555139003.66	1995-03-05	0	13321
8964	3584486552.46	1994-12-07	0	5912
9053	36197230803.94	1995-01-25	0	22620
9240	3696016334.35	1995-03-09	0	1601
9379	37507122016.97	1994-12-09	0	4329
9487	37927257840.09	1995-01-26	0	7775
9772	39076152274.27	1994-12-12	0	769
10092	4035696997.24	1994-12-20	0	9416
10125	40485131573.16	1994-12-28	0	11834
10848	43392189647.45	1995-01-01	0	10513
10958	43814196211.20	1995-01-10	0	15042
11154	44610164194.34	1995-03-11	0	15781
11242	4496245657.87	1994-12-29	0	436
11267	45059239264.56	1995-02-04	0	21847
11342	45350143240.78	1995-01-04	0	3056
11362	4544262571.45	1995-02-07	0	6111
11531	46115306350.62	1995-03-03	0	26891
11532	46116223894.81	1995-01-08	0	8102
11691	46755285293.62	1995-02-07	0	20615
11803	47203144726.55	1994-12-19	0	3757
12227	48899240474.36	1995-01-19	0	1327
12400	49600124037.71	1995-03-08	0	12017
12441	49761310767.12	1995-01-25	0	23611
12481	49921323725.09	1995-02-18	0	18522
12572	5027689619.62	1995-02-15	0	7765
12617	50465172431.66	1995-03-12	0	16332
12891	5155591484.44	1994-12-13	0	6565
13022	5207037563.53	1994-12-02	0	715
13126	52486277543.84	1995-01-05	0	15324
13146	52578180037.05	1995-03-08	0	12131
13350	53382116088.95	1994-12-28	0	9662
13722	5488284986.36	1995-02-07	0	8123
13768	5507261221.47	1995-01-05	0	181
13771	55075182615.62	1995-02-02	0	14220

Running time: 5627ms
Communication cost: 185.54 MB

2. TPC-H Query 10

(1) 1MB

row_num	c_custkey	c_name	c_nationkey	annotation
1	1	00000001	15	399
4	4	00000004	4	8136
13	13	00000013	3	8217
19	19	00000019	18	4504
37	37	00000037	8	360
41	41	00000041	10	4502
44	44	00000044	16	5933
49	49	00000049	10	473
52	52	00000052	11	7552
56	56	00000056	10	4117
61	61	00000061	17	14357
64	64	00000064	3	4444
67	67	00000067	9	3485
70	70	00000070	22	2390
76	76	00000076	0	7192
79	79	00000079	15	7318
80	80	00000080	0	1550
82	82	00000082	18	3905
92	92	00000092	2	4622
97	97	00000097	17	13144
101	101	00000101	2	870
103	103	00000103	9	9731
104	104	00000104	10	5606
109	109	00000109	16	2912
115	115	00000115	8	9309
118	118	00000118	18	7209
121	121	00000121	17	22072
122	122	00000122	3	1490
124	124	00000124	18	10799
125	125	00000125	19	8481
133	133	00000133	17	21930
142	142	00000142	9	10003
143	143	00000143	16	9558

Running time: 2009ms
Communication cost: 12.3652 MB

(2) 3MB

row_num	c_custkey	c_name	c_nationkey	annotation
1	1	00000001	15	109225
4	4	00000004	4	5334
7	7	00000007	18	65151
10	10	00000010	5	7525
13	13	00000013	3	126906

19	19	00000019	18	36731
25	25	00000025	12	14962
34	34	00000034	15	233755
35	35	00000035	17	9948
37	37	00000037	8	30587
38	38	00000038	12	115734
40	40	00000040	3	98360
46	46	00000046	6	42593
49	49	00000049	10	162143
52	52	00000052	11	58101
55	55	00000055	10	12889
58	58	00000058	13	133771
67	67	00000067	9	148960
76	76	00000076	0	97224
95	95	00000095	15	32122
97	97	00000097	17	76425
100	100	00000100	20	172657
103	103	00000103	9	42823
104	104	00000104	10	18148
106	106	00000106	1	4093
112	112	00000112	19	86165
121	121	00000121	17	132809
122	122	00000122	3	68682
130	130	00000130	9	282352
131	131	00000131	11	101382
136	136	00000136	7	27712
139	139	00000139	9	27948
142	142	00000142	9	132439
143	143	00000143	16	5932
145	145	00000145	13	53784
148	148	00000148	11	53408
154	154	00000154	19	32006
157	157	00000157	15	51922
164	164	00000164	4	70463
166	166	00000166	10	163119
169	169	00000169	18	13528
172	172	00000172	22	28661
181	181	00000181	9	106114
182	182	00000182	3	66216
187	187	00000187	4	35366
193	193	00000193	23	237315
202	202	00000202	7	223094
203	203	00000203	1	92363
205	205	00000205	12	67498
208	208	00000208	19	121013
214	214	00000214	8	53338
217	217	00000217	23	31867
220	220	00000220	16	96384
224	224	00000224	15	151050
226	226	00000226	3	68888
232	232	00000232	22	36097
233	233	00000233	3	95290
238	238	00000238	16	93062
242	242	00000242	3	47040
251	251	00000251	13	39567

256	256	00000256	10	172681
259	259	00000259	5	33166
260	260	00000260	1	21747
262	262	00000262	4	66911
269	269	00000269	14	45085
274	274	00000274	19	57532
277	277	00000277	23	172443
283	283	00000283	7	94450
286	286	00000286	22	37481
292	292	00000292	11	155232
298	298	00000298	21	192081
302	302	00000302	4	11829
307	307	00000307	13	90384
308	308	00000308	9	114463
313	313	00000313	0	65828
316	316	00000316	8	39858
325	325	00000325	15	116520
338	338	00000338	23	200527
340	340	00000340	2	137643
343	343	00000343	3	50091
344	344	00000344	2	7567
346	346	00000346	2	113975
350	350	00000350	15	46215
352	352	00000352	9	118354
353	353	00000353	10	91159
358	358	00000358	5	326676
359	359	00000359	14	54510
362	362	00000362	17	71096
364	364	00000364	23	135621
365	365	00000365	24	92398
367	367	00000367	13	17943
368	368	00000368	22	27429
370	370	00000370	12	119861
373	373	00000373	20	118398
374	374	00000374	22	26568
376	376	00000376	16	193117
389	389	00000389	9	128930
392	392	00000392	17	87708
394	394	00000394	23	132110
397	397	00000397	7	150506

Running time: 3503ms

Communication cost: 39.7549 MB

(3) 10MB

row_num	c_custkey	c_name	c_nationkey	annotation
1	1	00000001	15	1955
2	2	00000002	13	9872
7	7	00000007	18	8085
10	10	00000010	5	637
11	11	00000011	23	8249
22	22	00000022	3	3908
23	23	00000023	3	19336

28	28	00000028	8	6525
35	35	00000035	17	22998
40	40	00000040	3	12540
41	41	00000041	10	6891
43	43	00000043	19	34853
58	58	00000058	13	7630
59	59	00000059	1	5355
64	64	00000064	3	13306
71	71	00000071	7	3856
79	79	00000079	15	7601
86	86	00000086	0	14811
88	88	00000088	16	11863
94	94	00000094	9	175
97	97	00000097	17	11608
106	106	00000106	1	15747
107	107	00000107	15	2006
109	109	00000109	16	29422
110	110	00000110	10	2682
113	113	00000113	12	10488
116	116	00000116	16	1167
118	118	00000118	18	3797
121	121	00000121	17	18013
124	124	00000124	18	14668
130	130	00000130	9	10373
133	133	00000133	17	14988
136	136	00000136	7	5920
137	137	00000137	16	9518
143	143	00000143	16	2714
148	148	00000148	11	5221
149	149	00000149	19	25245
154	154	00000154	19	19736
155	155	00000155	0	2246
158	158	00000158	10	18587
163	163	00000163	21	8226
172	172	00000172	22	6105
175	175	00000175	10	4779
178	178	00000178	21	3837
179	179	00000179	4	1710
184	184	00000184	21	16716
188	188	00000188	5	12571
190	190	00000190	11	2325
193	193	00000193	23	5853
202	202	00000202	7	14456
205	205	00000205	12	798
215	215	00000215	9	1526
223	223	00000223	20	15968
226	226	00000226	3	14595
238	238	00000238	16	14926
244	244	00000244	15	8166
247	247	00000247	20	5482
248	248	00000248	10	12037
250	250	00000250	16	16810
251	251	00000251	13	5817
253	253	00000253	15	11913
254	254	00000254	1	3772

256	256	00000256	10	8579
262	262	00000262	4	4343
265	265	00000265	17	5757
272	272	00000272	2	1526
275	275	00000275	22	10942
277	277	00000277	23	4421
278	278	00000278	20	7130
283	283	00000283	7	16531
289	289	00000289	10	10212
299	299	00000299	4	467
302	302	00000302	4	11834
304	304	00000304	0	6252
313	313	00000313	0	8718
316	316	00000316	8	11675
319	319	00000319	6	6023
323	323	00000323	18	2822
325	325	00000325	15	8409
328	328	00000328	5	11808
332	332	00000332	22	11376
334	334	00000334	4	24629
337	337	00000337	0	4065
340	340	00000340	2	25186
341	341	00000341	9	13008
346	346	00000346	2	1555
352	352	00000352	9	16595
355	355	00000355	14	20416
364	364	00000364	23	1142
374	374	00000374	22	10668
379	379	00000379	7	27300
382	382	00000382	8	9649
386	386	00000386	24	15872
388	388	00000388	7	2248
389	389	00000389	9	5668
391	391	00000391	11	10134
394	394	00000394	23	10882
398	398	00000398	15	345
401	401	00000401	19	8002
403	403	00000403	14	5822

Running time: 5102ms

Communication cost: 142.878 MB

3. The extension query

(1) 1MB

row_num	o_orderkey	o_custkey	c_name	l_returnflag	annotation
Empty Relation!					

Running time: 5028ms

Communication cost: 223.537 MB

(2) 3MB

row_num		o_orderkey	o_custkey	c_name	l_returnflag	annotation
1	1	112	00000112	N	4200	
2	164	4	00000004	R	17062	
3	418	286	00000286	N	591	
4	868	311	00000311	R	10621	
5	896	5	00000005	A	3872	
6	993	238	00000238	N	4200	
7	1184	266	00000266	N	1347	
8	1408	163	00000163	N	48846	
9	1666	283	00000283	N	36053	
10	1696	11	00000011	N	11229	
11	1954	169	00000169	N	10339	
12	2370	422	00000422	A	14184	
13	2432	307	00000307	N	4576	
14	2630	253	00000253	R	37582	
15	2656	230	00000230	R	11229	
16	2662	112	00000112	N	3546	
17	2720	91	00000091	A	17248	
18	3108	253	00000253	A	13024	
19	3492	307	00000307	R	3143	
20	3552	103	00000103	N	12132	
21	3746	220	00000220	R	7227	
22	4004	205	00000205	A	8980	
23	4545	176	00000176	A	2816	
24	4803	370	00000370	N	4009	
25	4871	134	00000134	N	5729	
26	5254	332	00000332	A	18791	
27	5312	196	00000196	A	25413	
28	5346	110	00000110	A	2464	
29	5478	346	00000346	N	27777	
30	5570	332	00000332	N	12469	
31	6084	187	00000187	N	1971	
32	6278	101	00000101	R	7385	
33	6343	223	00000223	N	29075	
34	6402	119	00000119	N	5697	
35	7105	20	00000020	R	8448	
36	7138	406	00000406	N	8448	
37	7399	16	00000016	N	2816	
38	7524	182	00000182	R	5388	
39	7618	265	00000265	R	27912	
40	7621	7	00000007	N	1408	
41	7874	100	00000100	N	1634	
42	8134	418	00000418	N	10327	
43	8195	85	00000085	R	16282	
44	8582	199	00000199	A	9304	
45	8645	188	00000188	N	7751	
46	8706	100	00000100	N	16164	
47	8805	262	00000262	N	2464	
48	9159	341	00000341	N	20094	
49	9735	101	00000101	N	4381	
50	9955	304	00000304	N	12255	
51	9987	299	00000299	N	38379	
52	10501	274	00000274	N	25586	

53	10566175	00000175	N	7353
54	10598139	00000139	R	13072
55	10629196	00000196	A	3376
56	1066155	00000055	R	5632
57	11750247	00000247	N	352
58	12322257	00000257	R	1056
59	12358265	00000265	N	3489
60	12899260	00000260	N	1477
61	13569253	00000253	R	12806
62	13603149	00000149	N	7744
63	1389010	00000010	N	633
64	1392616	00000016	N	817
65	14147220	00000220	A	4044
66	14722223	00000223	N	28595
67	15396448	00000448	N	15119
68	15685383	00000383	N	633
69	1568716	00000016	R	5729
70	15875244	00000244	N	5697
71	16036244	00000244	R	58150
72	16134160	00000160	R	4652
73	16262160	00000160	A	3033
74	16391319	00000319	N	6752
75	16896220	00000220	N	19771
76	17473385	00000385	N	17157
77	17760284	00000284	A	1055

Running time: 11806ms

Communication cost: 715.632 MB

(3) 10MB

row_num	o_orderkey	o_custkey	c_name	l_returnflag	annotation
1	323	392	00000392	A	4000
2	390	1027	00001027	N	130
3	482	1252	00001252	N	528
4	768	971	00000971	N	2574
5	801	1178	00001178	A	726
6	1031	37	00000037	R	525
7	1284	1340	00001340	N	245
8	1571	1027	00001027	A	180
9	1792	472	00000472	R	675
10	1828	314	00000314	R	726
11	1856	1045	00001045	R	4324
12	2209	892	00000892	A	35
13	2279	794	00000794	A	162
14	3109	1222	00001222	A	2150
15	3233	1397	00001397	A	625
16	3553	908	00000908	R	252
17	3649	388	00000388	A	57
18	3746	731	00000731	R	644
19	3750	965	00000965	R	1786
20	4096	1378	00001378	R	200
21	4514	967	00000967	R	2160

22	5350	745	00000745	R	361
23	5959	230	00000230	A	1261
24	6499	118	00000118	N	240
25	6663	577	00000577	R	200
26	6789	1028	00001028	N	209
27	7047	1106	00001106	N	2025
28	7105	65	00000065	A	620
29	7140	1198	00001198	A	207
30	7589	1246	00001246	N	1400
31	7750	1418	00001418	R	150
32	8001	1261	00001261	R	20
33	8098	403	00000403	N	399
34	8199	488	00000488	N	1377
35	8261	1157	00001157	R	825
36	8518	655	00000655	N	992
37	8576	691	00000691	A	140
38	8997	607	00000607	A	2178
39	9382	337	00000337	N	264
40	9602	1481	00001481	A	1296
41	11010440		00000440	N	2024
42	11232661		00000661	N	750
43	1129950		00000050	R	765
44	11303388		00000388	R	1472
45	113651214		00001214	N	1922
46	11648949		00000949	N	874
47	11749818		00000818	N	3024
48	121301261		00001261	N	726
49	12228226		00000226	A	414
50	122311021		00001021	N	1008
51	12357154		00000154	N	444
52	12706458		00000458	A	2214
53	13125355		00000355	R	38
54	13185805		00000805	N	1400
55	136711291		00001291	N	516
56	139861333		00001333	N	1725
57	1415089		00000089	A	2178
58	148501348		00001348	N	1160
59	148521060		00001060	N	1122
60	149171148		00001148	N	1000
61	15872188		00000188	A	2550
62	16194469		00000469	R	2070
63	16995529		00000529	R	1406
64	17859583		00000583	A	58
65	182721282		00001282	N	285
66	1882265		00000065	A	1395
67	188511223		00001223	R	370
68	188801300		00001300	R	1800
69	1949089		00000089	N	682
70	199751255		00001255	A	2052
71	20066685		00000685	A	40
72	20166409		00000409	A	200
73	203221174		00001174	A	650
74	20899994		00000994	R	1938
75	21445883		00000883	R	3300
76	2150483		00000083	N	150

77	21760455	00000455	R	32
78	21797196	00000196	N	646
79	22276220	00000220	R	943
80	22436751	00000751	N	210
81	225601084	00001084	N	215
82	225951033	00001033	N	559
83	22597625	00000625	N	87
84	232991192	00001192	A	40
85	23367986	00000986	N	836
86	24005602	00000602	A	493
87	24519952	00000952	N	841
88	2477185	00000085	N	1221
89	24865497	00000497	R	1110
90	25248458	00000458	N	1350
91	254741277	00001277	A	52
92	25888136	00000136	N	1050
93	262091015	00001015	N	666
94	26274247	00000247	A	660
95	26400839	00000839	N	1998
96	27234181	00000181	N	170
97	272991255	00001255	A	483
98	27783463	00000463	N	475
99	27968632	00000632	N	2666
100	28032526	00000526	N	2720
101	28133788	00000788	N	756
102	283901045	00001045	R	1075
103	28996100	00000100	N	667
104	290631270	00001270	A	175
105	292231099	00001099	A	770
106	29255667	00000667	N	1575
107	29605248	00000248	A	25
108	29606785	00000785	N	464
109	29697490	00000490	N	29
110	298891207	00001207	R	112
111	306931468	00001468	N	2442
112	31073235	00000235	R	1075
113	31335233	00000233	N	190
114	314591406	00001406	N	1334
115	317511403	00001403	N	333
116	32227242	00000242	N	2268
117	32256200	00000200	N	700
118	32327307	00000307	R	280
119	32774259	00000259	A	119
120	328641096	00001096	N	874
121	33031611	00000611	R	270
122	33121478	00000478	N	368
123	33186131	00000131	R	840
124	335701285	00001285	R	32
125	33605409	00000409	R	190
126	33953746	00000746	R	1406
127	344981276	00001276	A	560
128	345301321	00001321	R	2356
129	34626400	00000400	A	275
130	34694304	00000304	N	215
131	351431499	00001499	N	836

132	354881171	00001171	N	1512
133	357811142	00001142	A	1710
134	35877473	00000473	A	510
135	36033584	00000584	R	1875
136	36230496	00000496	R	152
137	36646734	00000734	R	630
138	366731226	00001226	A	225
139	37122506	00000506	N	459
140	37380580	00000580	A	1716
141	37734943	00000943	A	2064
142	37794233	00000233	R	370
143	389181189	00001189	N	100
144	38980509	00000509	A	510
145	392641040	00001040	N	1650
146	392681255	00001255	R	736
147	395201102	00001102	N	990
148	39686388	00000388	A	208
149	39810949	00000949	N	2268
150	40032820	00000820	A	114
151	4086423	00000023	N	228
152	410281093	00001093	N	2625
153	412551207	00001207	R	140
154	41639830	00000830	N	164
155	417961264	00001264	N	525
156	41924685	00000685	N	155
157	41955121	00000121	N	1015
158	41990295	00000295	N	320
159	42053400	00000400	N	10
160	42246259	00000259	R	825
161	42567497	00000497	A	570
162	42690623	00000623	A	370
163	43266211	00000211	N	760
164	43298637	00000637	N	300
165	435881163	00001163	A	3168
166	43812973	00000973	N	841
167	438461061	00001061	R	3520
168	448961256	00001256	N	2775
169	45060593	00000593	R	476
170	451571496	00001496	N	1500
171	45187409	00000409	R	390
172	45447355	00000355	R	629
173	463101025	00001025	A	450
174	46341811	00000811	R	920
175	47015901	00000901	A	1260
176	47267689	00000689	R	970
177	47686595	00000595	R	1518
178	477801184	00001184	R	1292
179	47877737	00000737	A	2046
180	483871360	00001360	R	1584
181	48642239	00000239	A	80
182	48801508	00000508	A	630
183	4883634	00000034	A	119
184	48896913	00000913	A	528
185	494091385	00001385	N	2400
186	50566548	00000548	N	1715

187	506621300	00001300	N	1122
188	50753169	00000169	N	3300
189	50790280	00000280	N	1452
190	508801079	00001079	A	3600
191	510441234	00001234	R	532
192	51300395	00000395	N	80
193	51684505	00000505	R	3588
194	519371010	00001010	R	1554
195	52102715	00000715	A	1806
196	52135268	00000268	A	120
197	525451042	00001042	N	2400
198	52609227	00000227	N	675
199	529961117	00001117	N	232
200	53217244	00000244	N	40
201	53639104	00000104	N	798
202	538581102	00001102	N	180
203	544351451	00001451	N	475
204	54532400	00000400	N	460
205	5488041	00000041	N	48
206	54916778	00000778	N	30
207	54917179	00000179	A	1125
208	55013131	00000131	N	900
209	55014946	00000946	A	713
210	55299908	00000908	A	2904
211	555241358	00001358	N	70
212	555531453	00001453	R	220
213	563231213	00001213	N	165
214	56547760	00000760	A	760
215	59012910	00000910	A	68
216	59110410	00000410	N	609
217	593331124	00001124	N	2046
218	59589281	00000281	A	930

Running time: 36313ms

Communication cost: 2562.21 MB