

Out [36]: [Show Code](#)

Overall Metric Sums

	label	TPCH wall time	TPC-DS wall time	TPCH CPU time	TPC-DS CPU time	TPCH peak memory	TPC-DS peak memory
0	Baseline	534.078000	917.052167	54315.100000	95152.266333	1.162 TiB	934.153 GiB
1	Force fixed partitioning	518.289500	917.184500	55810.600000	96071.662833	1.131 TiB	0.925 TiB
2	Force fixed partitioning (64MB buffer)	544.758833	903.557167	56364.000000	95551.200333	1.147 TiB	0.921 TiB

Tags

	Tag	Label	Color
0	partitioned-output-fixed-distr-oss-7_r6g_8xlarge-402-S-94986715bf-arm64-hive_sf1000_orc_part-b38	Baseline	c
1	partitioned-output-fixed-distr-oss-7_r6g_8xlarge-402-S-36fdadaad4-arm64-hive_sf1000_orc_part-b36	Force fixed partitioning	y
2	partitioned-output-fixed-distr-oss-7_r6g_8xlarge-402-S-b88f4c0194-arm64-hive_sf1000_orc_part-b37	Force fixed partitioning (64MB buffer)	m

FAILED QUERIES

Baseline

benchmark	query	mean_duration	std_dev
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Force fixed partitioning

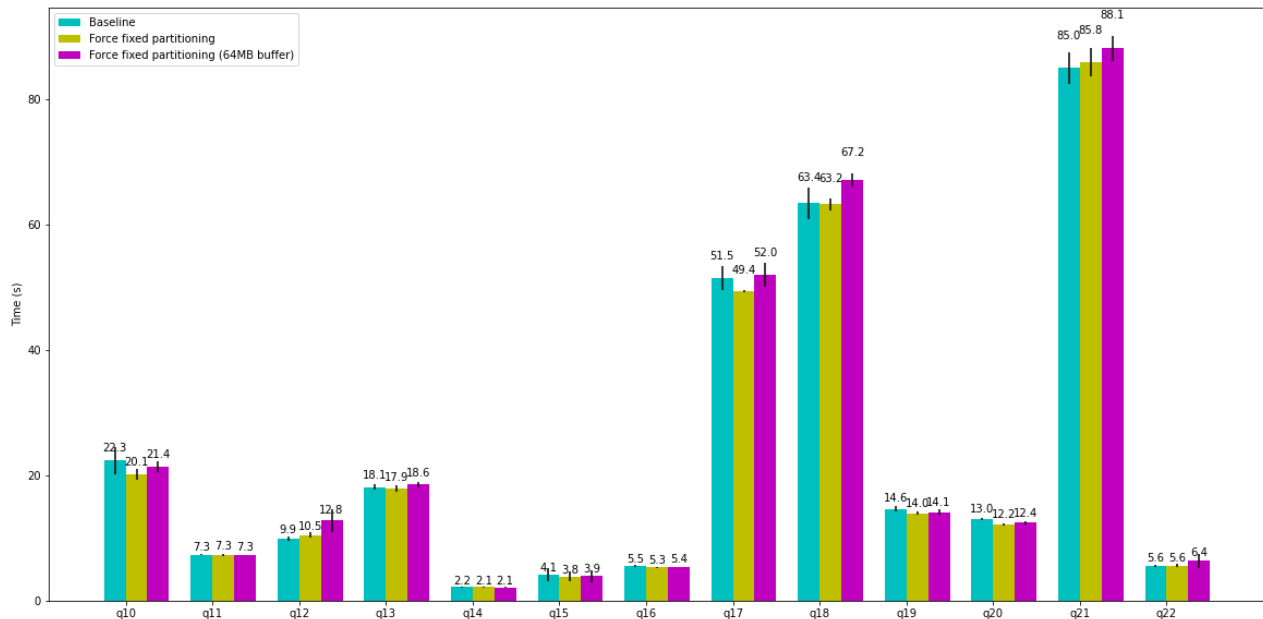
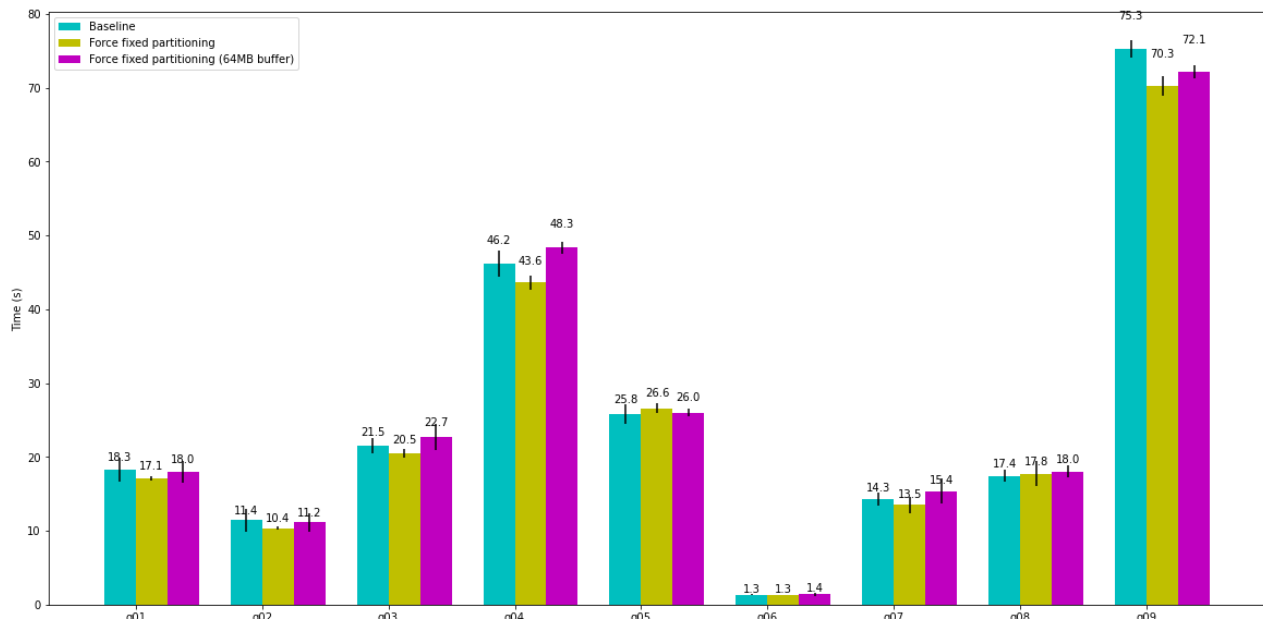
benchmark	query	mean_duration	std_dev
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0	presto/tpcds	q38	59536.833333	122636.409624
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Force fixed partitioning (64MB buffer)

benchmark	query	mean_duration	std_dev
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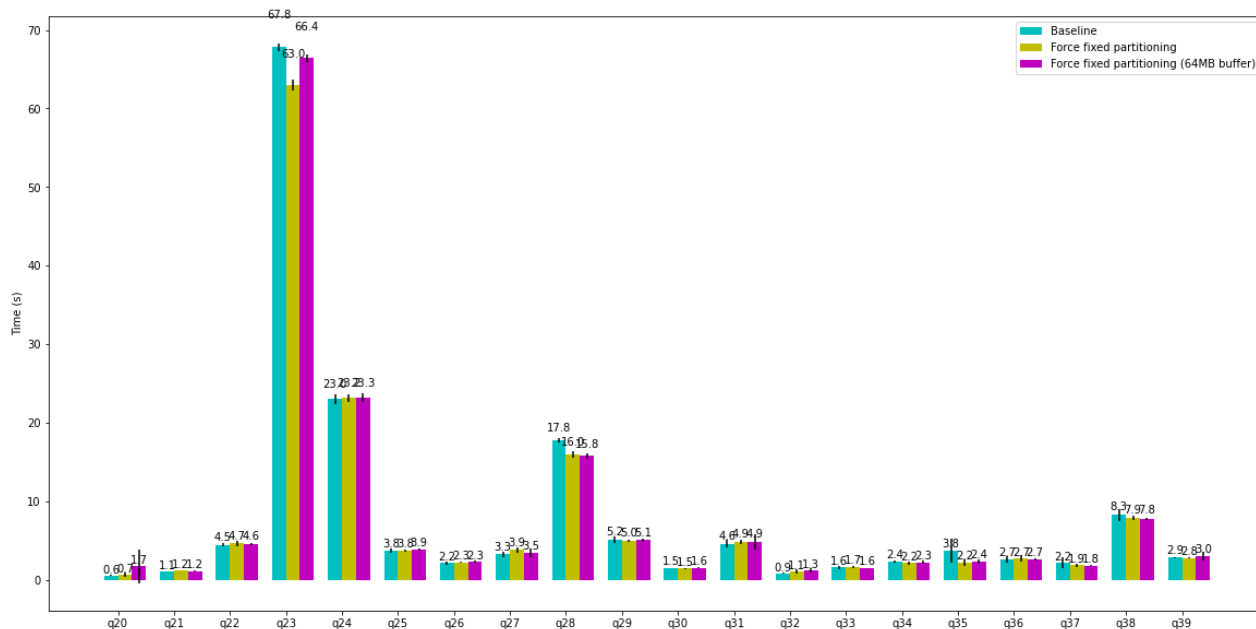
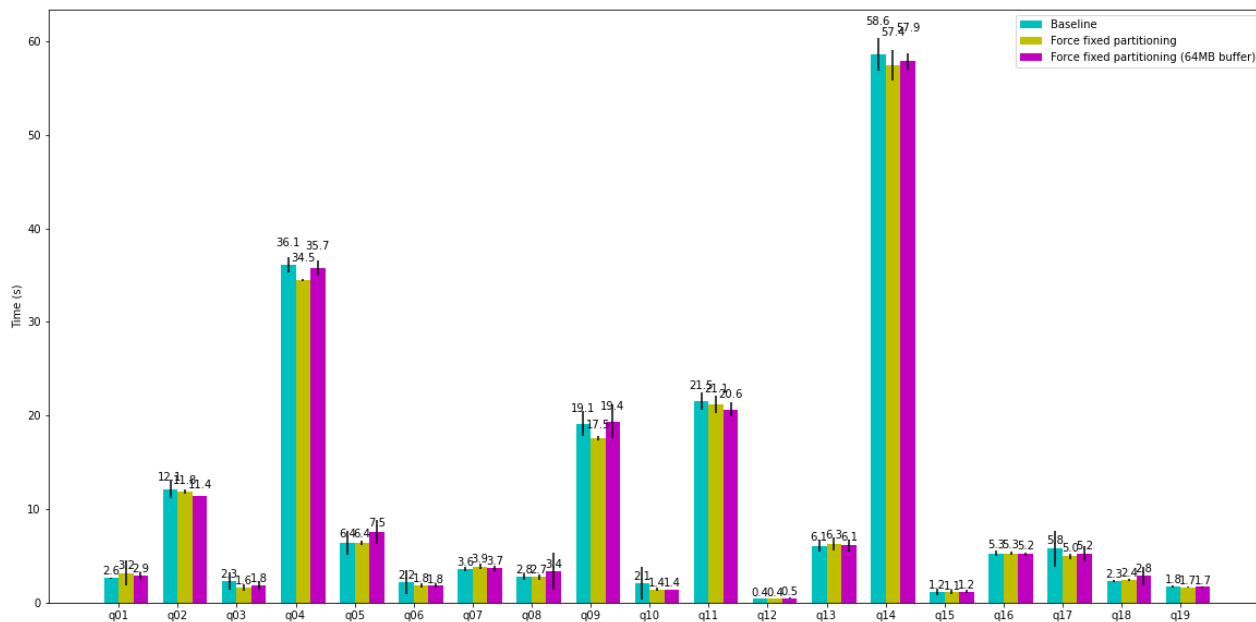
TPC-H Comparison (DURATION)



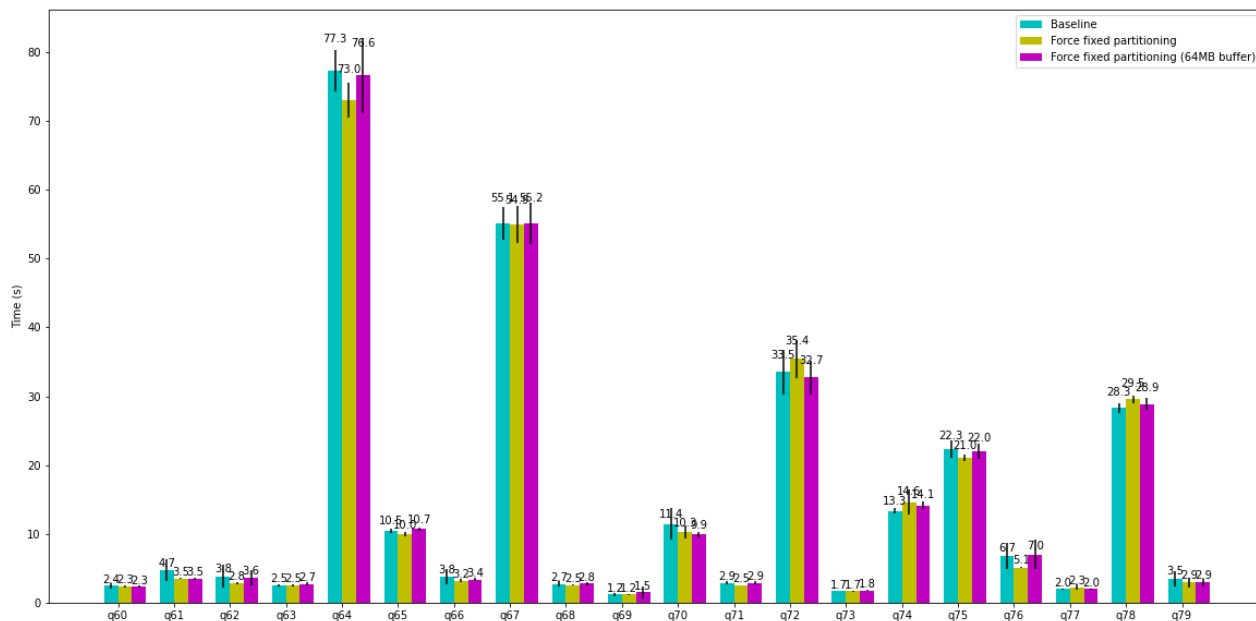
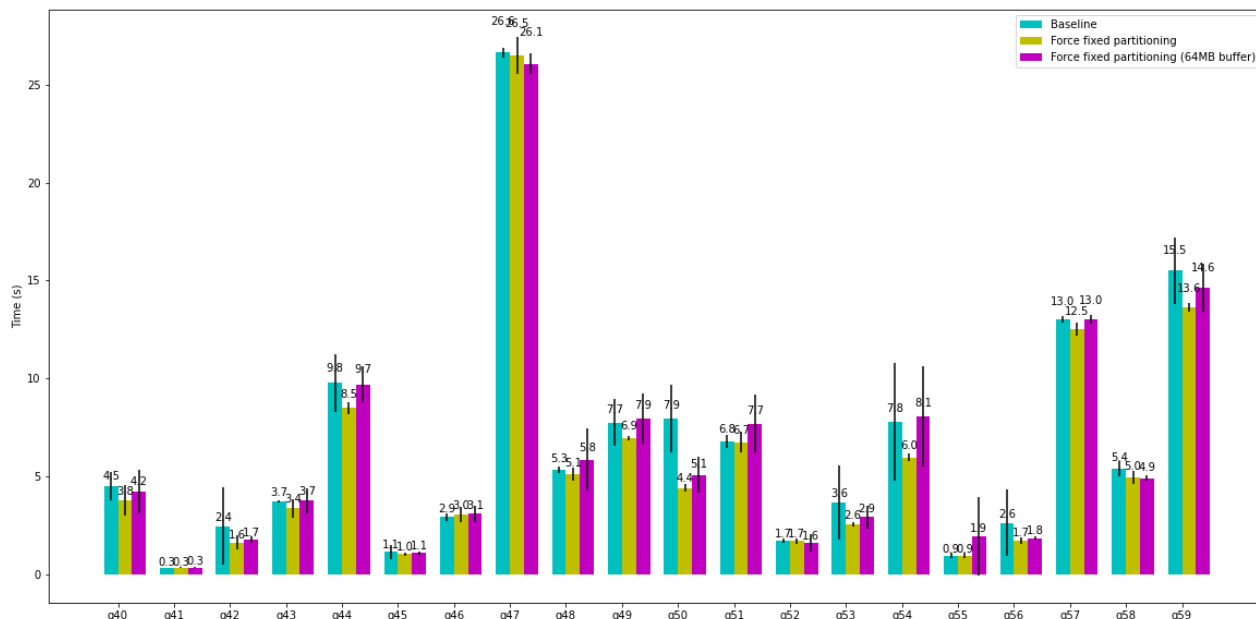
query	Baseline mean	Baseline std.dev	Force fixed partitioning mean	Force fixed partitioning std.dev	Force fixed partitioning (64MB buffer) mean	Force fixed partitioning (64MB buffer) std.dev
0 presto/tpch: q01	18.271500	1.690301	17.101833	0.287410	17.970500	1.509761
1 presto/tpch: q02	11.414833	1.601639	10.362500	0.185036	11.154667	1.265526
2 presto/tpch: q03	21.518167	1.036481	20.492000	0.627664	22.735500	1.795323
3 presto/tpch: q04	46.210833	1.774188	43.619167	0.935887	48.325833	0.770470
4 presto/tpch: q05	25.769500	1.359498	26.598167	0.665083	26.007500	0.569892
5 presto/tpch: q06	1.334667	0.070727	1.290500	0.061809	1.414833	0.228033

	query	Baseline mean	Baseline std.dev	Force fixed partitioning mean	Force fixed partitioning std.dev	Force fixed partitioning (64MB buffer) mean	Force fixed partitioning (64MB buffer) std.dev
6	presto/tpch: q07	14.289667	0.949266	13.485667	1.139536	15.354167	1.720072
7	presto/tpch: q08	17.418333	0.794764	17.756000	1.669975	17.993833	0.799827
8	presto/tpch: q09	75.289500	1.140560	70.280833	1.356342	72.142000	0.896999
9	presto/tpch: q10	22.344000	2.164225	20.134500	0.804564	21.377000	0.911433
10	presto/tpch: q11	7.338000	0.107885	7.345500	0.164273	7.303333	0.050218
11	presto/tpch: q12	9.896833	0.393677	10.483833	0.432784	12.817000	1.842726
12	presto/tpch: q13	18.110333	0.421802	17.892167	0.563673	18.567667	0.439851
13	presto/tpch: q14	2.160167	0.107806	2.142167	0.163792	2.134833	0.138922
14	presto/tpch: q15	4.070000	1.045391	3.849833	0.752891	3.915667	1.003180
15	presto/tpch: q16	5.513833	0.171888	5.339000	0.073547	5.400000	0.044560
16	presto/tpch: q17	51.502000	1.903610	49.366500	0.221621	51.982667	1.917800
17	presto/tpch: q18	63.422833	2.550008	63.215333	0.957615	67.176167	1.074348
18	presto/tpch: q19	14.645333	0.437580	13.955333	0.217416	14.112000	0.444158
19	presto/tpch: q20	12.996833	0.232181	12.171833	0.194894	12.405333	0.186821
20	presto/tpch: q21	85.001333	2.486003	85.836000	2.251455	88.109667	1.960779
21	presto/tpch: q22	5.559500	0.207082	5.570833	0.292818	6.358667	1.124271

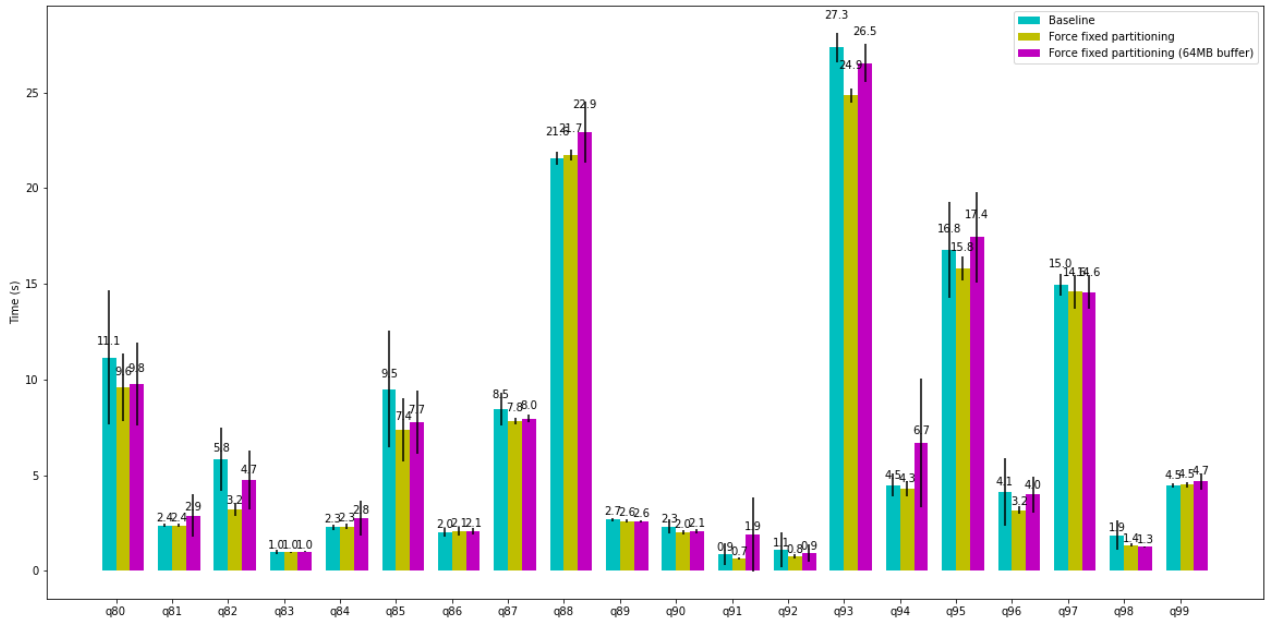
TPC-DS Comparison (DURATION)



Benchmarks comparison-Andrii



Benchmarks comparison-Andrii



query	Baseline mean	Baseline std.dev	Force fixed partitioning mean	Force fixed partitioning std.dev	Force fixed partitioning (64MB buffer) mean	Force fixed partitioning (64MB buffer) std.dev
0 presto/tpcds: q01	2.640333	0.066229	3.165167	1.315877	2.853167	0.431475
1 presto/tpcds: q02	12.146667	0.956189	11.255833	0.075165	11.402333	0.043752
2 presto/tpcds: q03	2.345000	0.912369	1.613000	0.302236	1.838833	0.511327
3 presto/tpcds: q04	36.091667	0.832569	36.761833	0.345440	35.745333	0.766290
4 presto/tpcds: q05	6.380833	1.309895	6.423500	0.248931	7.523000	1.262446
5 presto/tpcds: q06	2.179167	1.302060	1.844833	0.217463	1.806000	0.250833
6 presto/tpcds: q07	3.583167	0.223418	3.872833	0.247673	3.653833	0.295063
7 presto/tpcds: q08	2.750167	0.368570	2.716333	0.334557	3.359833	1.927231
8 presto/tpcds: q09	19.125667	1.370163	17.544167	0.237608	19.373000	1.771109
9 presto/tpcds: q10	2.128833	1.745659	1.413833	0.142441	1.371833	0.045013
10 presto/tpcds: q11	21.516333	0.926147	21.141167	0.944487	20.631000	0.748588
11 presto/tpcds: q12	0.419500	0.023484	0.426667	0.021538	0.486500	0.100512
12 presto/tpcds: q13	6.079667	0.607137	6.284833	0.660182	6.132667	0.630274
13 presto/tpcds: q14	58.594667	1.732602	56.653667	0.515391	57.868833	0.857751

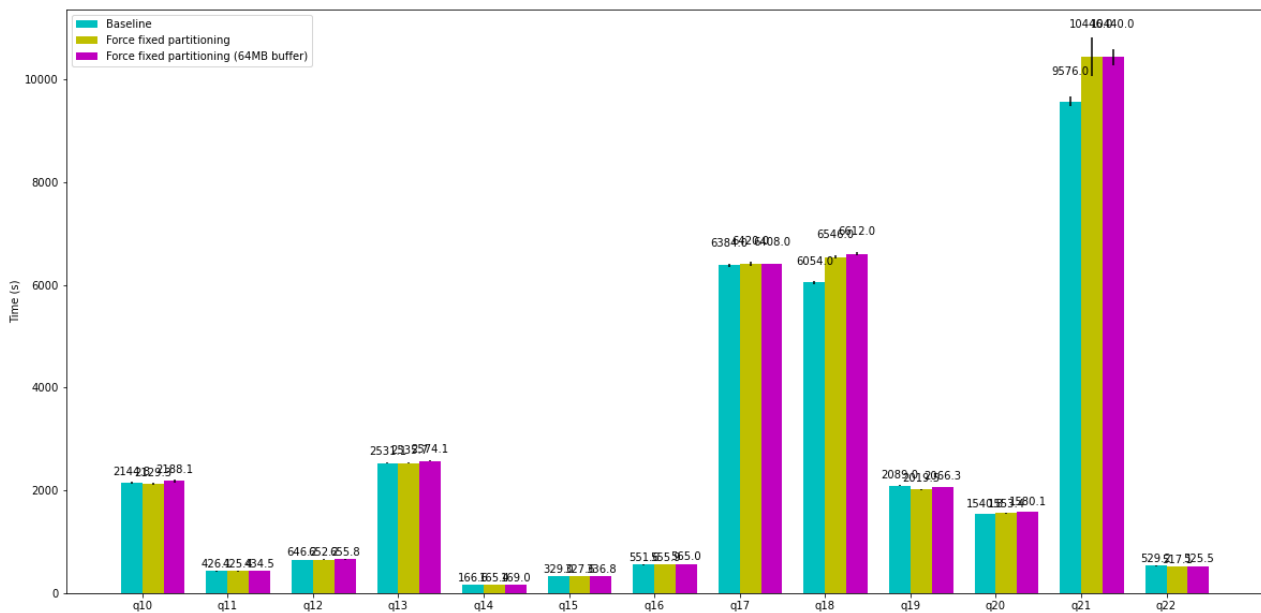
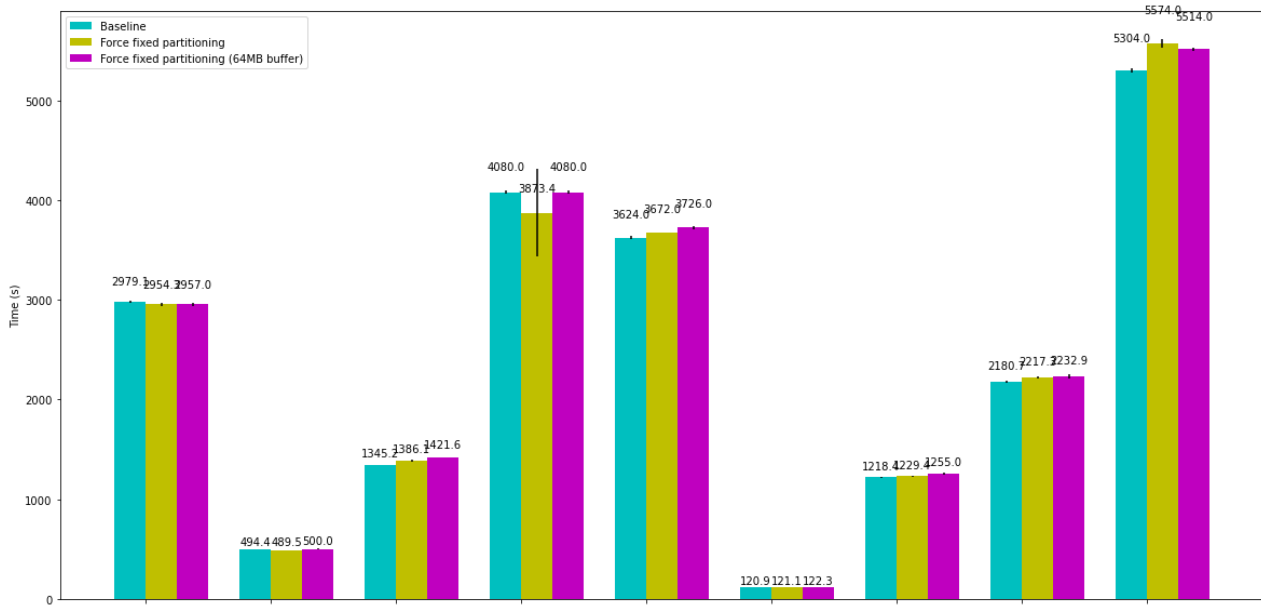
	query	Baseline mean	Baseline std.dev	Force fixed partitioning mean	Force fixed partitioning std.dev	Force fixed partitioning (64MB buffer) mean	Force fixed partitioning (64MB buffer) std.dev
14	presto/tpcds: q15	1.179333	0.354760	1.115500	0.219226	1.193333	0.192108
15	presto/tpcds: q16	5.261833	0.270648	5.256833	0.195082	5.175500	0.170370
16	presto/tpcds: q17	5.775833	1.920235	4.780667	0.124314	5.244500	0.799445
17	presto/tpcds: q18	2.329833	0.094580	2.553833	0.138546	2.836333	1.011527
18	presto/tpcds: q19	1.774500	0.115136	1.658167	0.053177	1.680500	0.044415
19	presto/tpcds: q20	0.617500	0.126885	0.687667	0.264530	1.749333	2.178749
20	presto/tpcds: q21	1.134833	0.006369	1.240500	0.019491	1.180833	0.013977
21	presto/tpcds: q22	4.475500	0.185428	4.720667	0.354332	4.592167	0.202892
22	presto/tpcds: q23	67.792667	0.487656	62.989333	0.685975	66.409667	0.487492
23	presto/tpcds: q24	23.035000	0.659588	23.179000	0.496765	23.253667	0.536601
24	presto/tpcds: q25	3.760167	0.233447	4.219667	0.245239	3.893500	0.180114
25	presto/tpcds: q26	2.185833	0.192120	2.270833	0.093547	2.338500	0.151689
26	presto/tpcds: q27	3.277500	0.332678	3.789667	0.456984	3.490167	0.559742
27	presto/tpcds: q28	17.783667	0.242379	16.033833	0.429371	15.804000	0.340716
28	presto/tpcds: q29	5.152667	0.468824	5.014000	0.150866	5.083667	0.212366
29	presto/tpcds: q30	1.547333	0.035506	1.470500	0.057577	1.554167	0.091143
30	presto/tpcds: q31	4.642333	0.486607	4.859500	0.293821	4.890167	1.008604
31	presto/tpcds: q32	0.875667	0.055813	1.113667	0.254616	1.276000	0.302095
32	presto/tpcds: q33	1.613000	0.161393	1.707333	0.121942	1.556500	0.012390
33	presto/tpcds: q34	2.395667	0.170011	2.174000	0.212385	2.292000	0.173447
34	presto/tpcds: q35	3.781500	1.530313	2.237333	0.373068	2.409167	0.277845
35	presto/tpcds: q36	2.657833	0.366613	2.720167	0.419584	2.651500	0.106682

	query	Baseline mean	Baseline std.dev	Force fixed partitioning mean	Force fixed partitioning std.dev	Force fixed partitioning (64MB buffer) mean	Force fixed partitioning (64MB buffer) std.dev
36	presto/tpcds: q37	2.195333	0.687786	1.880333	0.148189	1.848500	0.107195
37	presto/tpcds: q38	8.297000	0.743430	7.899500	0.319322	7.818667	0.129107
38	presto/tpcds: q39	2.869167	0.023727	2.813000	0.052027	3.015500	0.537705
39	presto/tpcds: q40	4.480333	0.736068	3.762000	0.787569	4.199500	1.103299
40	presto/tpcds: q41	0.296500	0.013795	0.314000	0.028291	0.331167	0.041983
41	presto/tpcds: q42	2.444000	1.987590	1.613500	0.373728	1.748333	0.152461
42	presto/tpcds: q43	3.707167	0.068753	3.357500	0.459462	3.746167	0.652717
43	presto/tpcds: q44	9.755167	1.487598	8.486000	0.297314	9.686000	0.911633
44	presto/tpcds: q45	1.137000	0.366487	1.010833	0.095462	1.063333	0.103006
45	presto/tpcds: q46	2.898833	0.198779	3.033833	0.392384	3.074000	0.400593
46	presto/tpcds: q47	26.636000	0.260075	26.508167	0.937194	26.073833	0.521245
47	presto/tpcds: q48	5.321333	0.178987	5.105667	0.316191	5.845833	1.606101
48	presto/tpcds: q49	7.736833	1.196434	6.924500	0.120540	7.944667	1.280903
49	presto/tpcds: q50	7.924167	1.719562	4.394000	0.192737	5.057833	0.916241
50	presto/tpcds: q51	6.750167	0.340357	6.738833	0.531314	7.687667	1.455010
51	presto/tpcds: q52	1.687833	0.117811	1.674000	0.118279	1.585667	0.462361
52	presto/tpcds: q53	3.646000	1.874639	2.553667	0.113861	2.919500	0.583747
53	presto/tpcds: q54	7.766833	3.000130	5.957833	0.214393	8.051000	2.565248
54	presto/tpcds: q55	0.936833	0.151894	0.948333	0.143586	1.930167	2.017431
55	presto/tpcds: q56	2.617000	1.720280	1.705833	0.182559	1.827167	0.078845
56	presto/tpcds: q57	12.999333	0.177487	12.497833	0.325915	13.008833	0.197451
57	presto/tpcds: q58	5.397000	0.390255	4.951000	0.330293	4.903667	0.128374

	query	Baseline mean	Baseline std.dev	Force fixed partitioning mean	Force fixed partitioning std.dev	Force fixed partitioning (64MB buffer) mean	Force fixed partitioning (64MB buffer) std.dev
58	presto/tpcds:q59	15.493167	1.712166	13.624167	0.207258	14.636833	1.208874
59	presto/tpcds:q60	2.448500	0.375855	2.332500	0.213060	2.279333	0.160107
60	presto/tpcds:q61	4.679667	1.616599	3.506000	0.116790	3.460833	0.122438
61	presto/tpcds:q62	3.833167	1.668071	2.811000	0.164342	3.617333	1.062279
62	presto/tpcds:q63	2.512167	0.227069	2.516833	0.177540	2.691833	0.215085
63	presto/tpcds:q64	77.290833	3.029133	73.037333	2.478154	76.609167	5.450047
64	presto/tpcds:q65	10.468500	0.293487	9.970167	0.309040	10.696167	0.209324
65	presto/tpcds:q66	3.772500	1.185361	3.158667	0.233270	3.357167	0.210864
66	presto/tpcds:q67	55.148000	2.403255	54.935167	2.703767	55.185167	3.028404
67	presto/tpcds:q68	2.720167	0.358451	2.549333	0.035658	2.758833	0.212210
68	presto/tpcds:q69	1.189833	0.259903	1.217667	0.097631	1.511833	0.910357
69	presto/tpcds:q70	11.443833	2.295034	10.302500	0.992708	9.877833	0.459533
70	presto/tpcds:q71	2.896333	0.248391	2.491667	0.034685	2.876500	0.249862
71	presto/tpcds:q72	33.524333	3.281320	35.430833	2.808263	32.719500	2.496797
72	presto/tpcds:q73	1.687667	0.043380	1.683000	0.057834	1.766333	0.064991
73	presto/tpcds:q74	13.314333	0.389279	13.672667	1.362865	14.140833	0.597413
74	presto/tpcds:q75	22.330833	1.204629	20.996667	0.452775	21.995667	1.075932
75	presto/tpcds:q76	6.743000	1.935206	5.098667	0.130130	7.020167	2.125075
76	presto/tpcds:q77	1.977667	0.060228	2.257833	0.388919	1.997000	0.053096
77	presto/tpcds:q78	28.283833	0.711667	25.999000	0.502507	28.881167	0.922895
78	presto/tpcds:q79	3.522500	1.104134	2.939167	0.673796	2.946667	0.577623
79	presto/tpcds:q80	11.144833	3.501130	8.893333	0.839266	9.783333	2.170756

	query	Baseline mean	Baseline std.dev	Force fixed partitioning mean	Force fixed partitioning std.dev	Force fixed partitioning (64MB buffer) mean	Force fixed partitioning (64MB buffer) std.dev
80	presto/tpcds: q81	2.367667	0.085983	2.372000	0.087494	2.888667	1.107838
81	presto/tpcds: q82	5.847500	1.655169	3.222833	0.322009	4.743333	1.524331
82	presto/tpcds: q83	1.016000	0.114030	0.976000	0.024199	1.010500	0.017986
83	presto/tpcds: q84	2.279167	0.156967	2.331500	0.123508	2.759000	0.915662
84	presto/tpcds: q85	9.495500	3.058886	7.376833	1.628201	7.748833	1.647634
85	presto/tpcds: q86	2.028333	0.243360	2.070833	0.223790	2.073500	0.176436
86	presto/tpcds: q87	8.466833	0.859893	7.809333	0.163959	7.964500	0.200538
87	presto/tpcds: q88	21.565333	0.336650	21.737833	0.284380	22.931000	1.593854
88	presto/tpcds: q89	2.683167	0.104166	2.603833	0.090030	2.581167	0.064966
89	presto/tpcds: q90	2.324500	0.352113	2.015167	0.108553	2.089500	0.126249
90	presto/tpcds: q91	0.881333	0.573619	0.669500	0.054790	1.900667	1.938054
91	presto/tpcds: q92	1.115500	0.927386	0.761667	0.095057	0.939667	0.445444
92	presto/tpcds: q93	27.340667	0.773609	24.858667	0.370454	26.535833	1.000074
93	presto/tpcds: q94	4.495667	0.572667	4.293667	0.405399	6.684667	3.383374
94	presto/tpcds: q95	16.754500	2.516389	15.788000	0.638000	17.432500	2.368007
95	presto/tpcds: q96	4.131000	1.769979	3.173000	0.205158	3.986000	0.929269
96	presto/tpcds: q97	14.975667	0.569480	14.584500	0.893878	14.579000	0.909843
97	presto/tpcds: q98	1.858000	0.772081	1.352167	0.102028	1.262833	0.031295
98	presto/tpcds: q99	4.468667	0.119572	4.517167	0.140582	4.668167	0.433449

TPC-H Comparison (CPU)

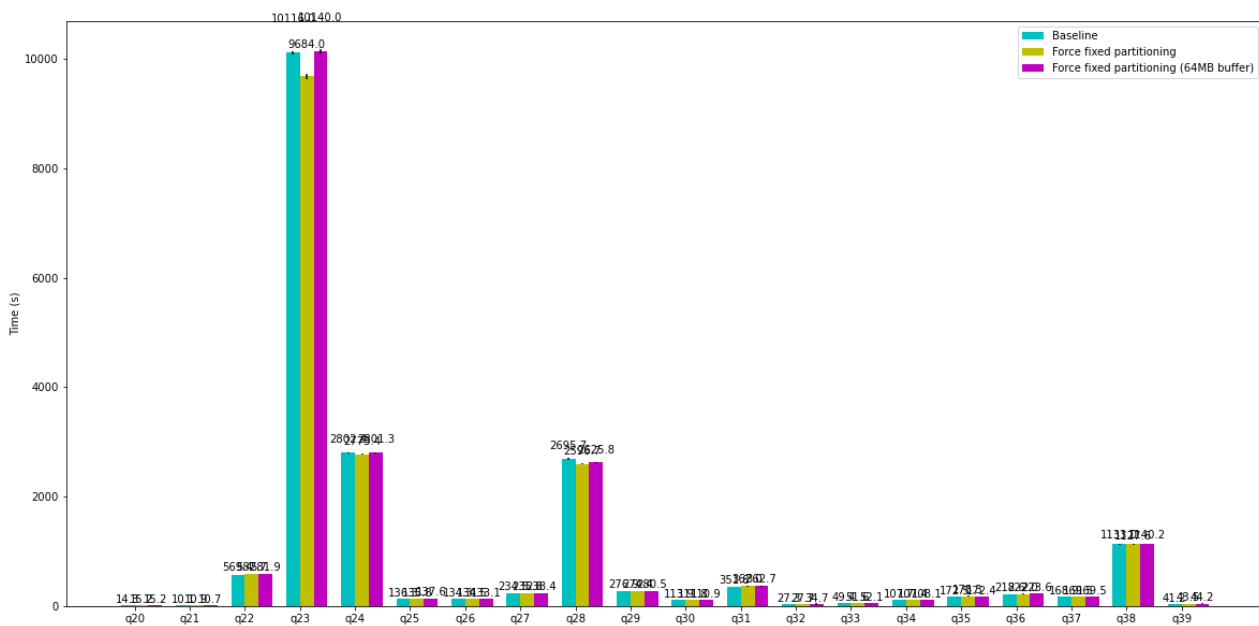
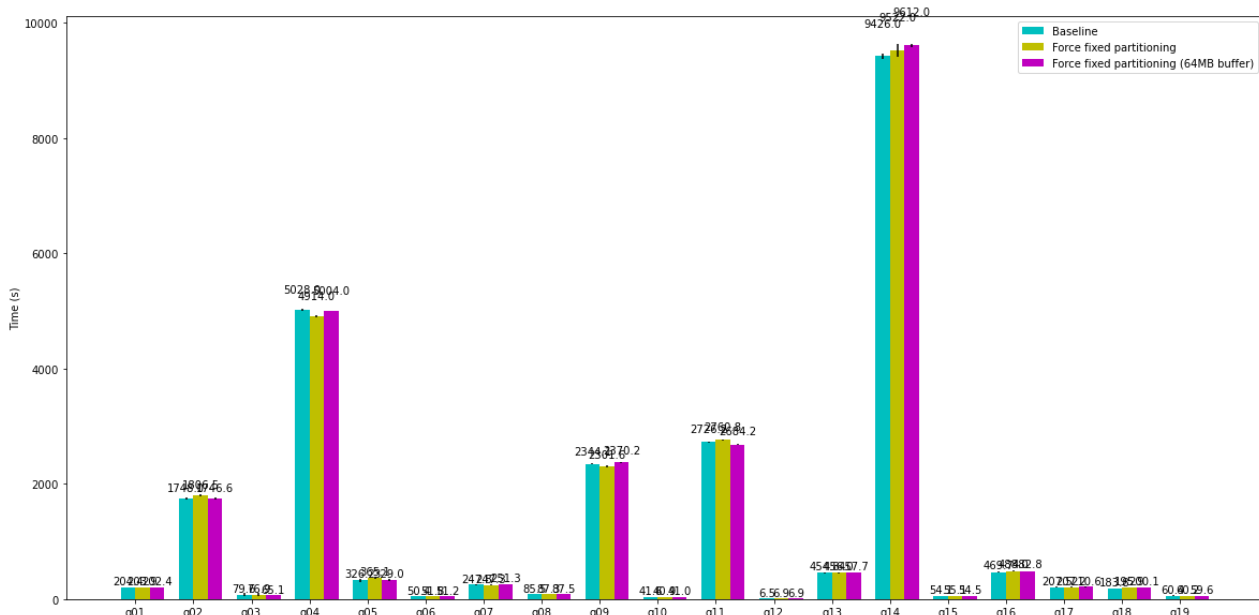


query	Baseline mean	Baseline std.dev	Force fixed partitioning mean	Force fixed partitioning std.dev	Force fixed partitioning (64MB buffer) mean	Force fixed partitioning (64MB buffer) std.dev
0 presto/tpch: q01	2979.1	9.796122	2954.3	11.948389	2957.0	18.402174
1 presto/tpch: q02	494.4	0.848528	489.5	0.701427	500.0	2.389979
2 presto/tpch: q03	1345.2	2.276840	1386.1	7.545860	1421.6	2.701111
3 presto/tpch: q04	4080.0	18.590320	3873.4	438.933963	4080.0	18.590320
4 presto/tpch: q05	3624.0	18.590320	3672.0	0.000000	3726.0	19.718012
5 presto/tpch: q06	120.9	0.328634	121.1	0.244949	122.3	0.244949

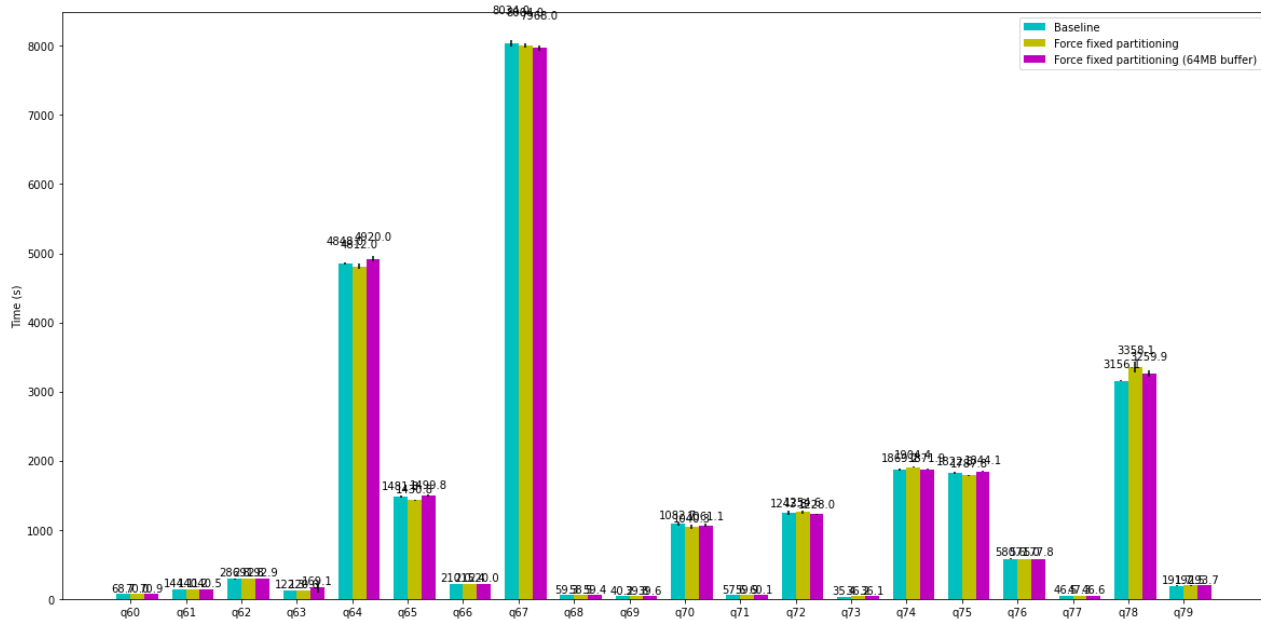
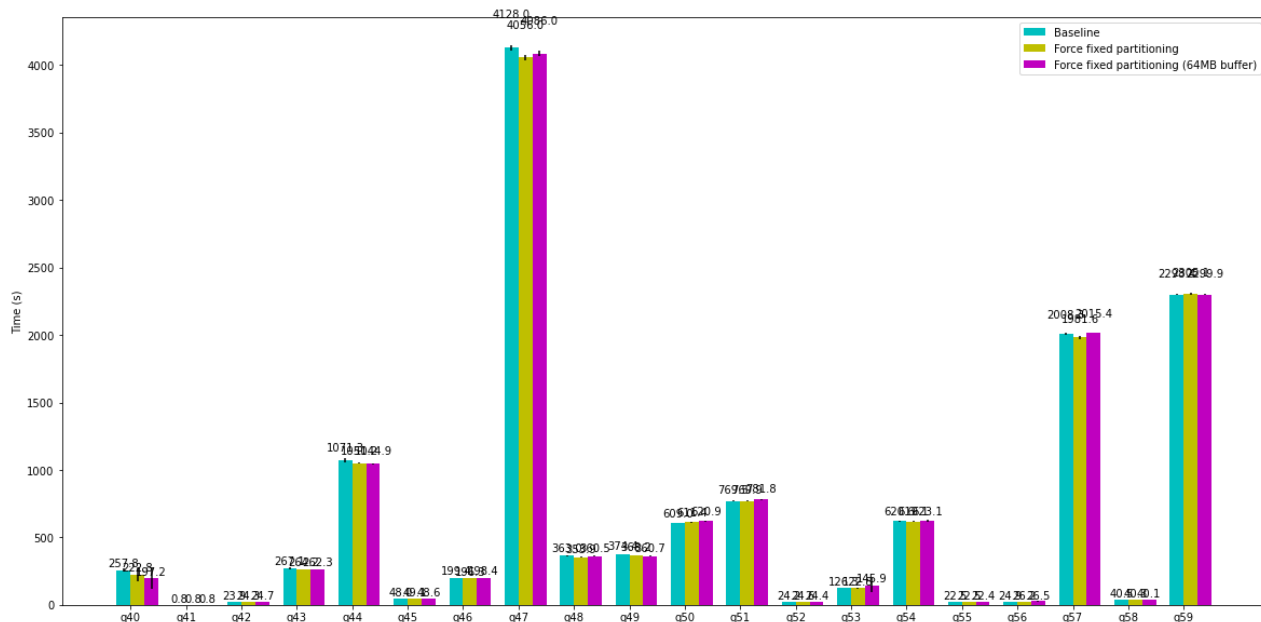
	query	Baseline mean	Baseline std.dev	Force fixed partitioning mean	Force fixed partitioning std.dev	Force fixed partitioning (64MB buffer) mean	Force fixed partitioning (64MB buffer) std.dev
6	presto/tpch: q07	1218.4	9.238182	1229.4	3.394113	1255.0	6.688498
7	presto/tpch: q08	2180.7	12.561369	2217.3	11.042282	2232.9	19.044684
8	presto/tpch: q09	5304.0	18.590320	5574.0	42.085627	5514.0	14.696938
9	presto/tpch: q10	2144.8	21.191696	2129.3	26.745243	2188.1	29.631537
10	presto/tpch: q11	426.1	1.836301	425.4	1.971801	434.5	1.489966
11	presto/tpch: q12	646.2	0.848528	652.2	2.400000	655.8	1.819890
12	presto/tpch: q13	2531.1	5.599643	2535.7	8.168966	2574.1	5.025933
13	presto/tpch: q14	166.6	2.066882	165.4	1.117139	169.0	1.501999
14	presto/tpch: q15	329.0	0.979796	327.6	1.003992	336.8	0.903327
15	presto/tpch: q16	551.6	3.279024	555.9	3.005994	565.0	2.906544
16	presto/tpch: q17	6384.0	37.180640	6420.0	43.598165	6408.0	0.000000
17	presto/tpch: q18	6054.0	27.099815	6546.0	35.394915	6612.0	37.180640
18	presto/tpch: q19	2089.0	9.300323	2019.5	13.245830	2066.3	4.480625
19	presto/tpch: q20	1540.8	4.122135	1553.4	9.629953	1580.1	1.457395
20	presto/tpch: q21	9576.0	99.245151	10446.0	377.170518	10440.0	160.996894
21	presto/tpch: q22	529.2	2.914790	517.1	3.360357	525.5	2.321207

TPC-DS Comparison (CPU)

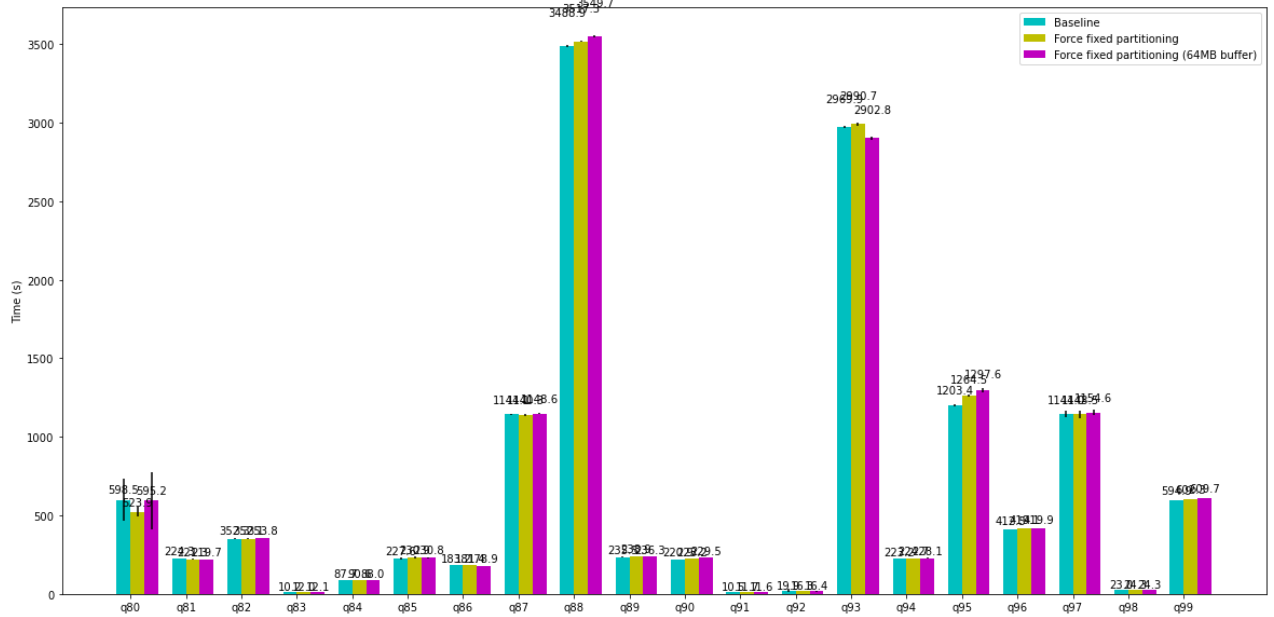
Benchmarks comparison-Andrii



Benchmarks comparison-Andrii



Benchmarks comparison-Andrii



query	Baseline mean	Baseline std.dev	Force fixed partitioning mean	Force fixed partitioning std.dev	Force fixed partitioning (64MB buffer) mean	Force fixed partitioning (64MB buffer) std.dev
0 presto/tpcds: q01	204.400000	2.234278	203.900000	2.321207	202.400000	2.201817
1 presto/tpcds: q02	1748.000000	13.274336	1806.500000	18.451992	1746.600000	13.713643
2 presto/tpcds: q03	79.600000	30.969921	64.900000	0.701427	65.100000	0.328634
3 presto/tpcds: q04	5028.000000	18.590320	4914.000000	19.718012	5004.000000	0.000000
4 presto/tpcds: q05	326.200000	24.193222	332.400000	19.652175	329.000000	16.888339
5 presto/tpcds: q06	50.388333	0.544515	50.211667	0.185625	51.240000	0.410171
6 presto/tpcds: q07	247.800000	1.138420	249.900000	0.985901	251.300000	1.224745
7 presto/tpcds: q08	85.500000	1.643168	87.300000	1.122497	87.500000	3.914588
8 presto/tpcds: q09	2344.100000	8.723073	2312.400000	8.270429	2370.200000	8.171169
9 presto/tpcds: q10	41.558333	1.074754	40.893333	1.484974	41.040000	1.165247
10 presto/tpcds: q11	2726.200000	7.947830	2669.000000	23.663643	2684.200000	14.007998
11 presto/tpcds: q12	6.455000	0.030166	6.925000	0.066257	6.876667	0.024221
12 presto/tpcds: q13	454.800000	5.589991	456.000000	7.513188	457.700000	1.583667
13 presto/tpcds: q14	9426.000000	42.085627	9522.000000	108.598343	9612.000000	22.768399

	query	Baseline mean	Baseline std.dev	Force fixed partitioning mean	Force fixed partitioning std.dev	Force fixed partitioning (64MB buffer) mean	Force fixed partitioning (64MB buffer) std.dev
14	presto/tpcds: q15	54.058333	0.312629	55.123333	0.696754	54.526667	0.280404
15	presto/tpcds: q16	469.700000	7.283680	464.100000	7.984735	482.800000	2.647263
16	presto/tpcds: q17	207.500000	5.517608	207.200000	6.150122	210.600000	5.717342
17	presto/tpcds: q18	183.800000	0.309839	195.900000	2.236962	200.100000	2.957702
18	presto/tpcds: q19	60.353333	1.609219	60.235000	0.554536	59.641667	0.594186
19	presto/tpcds: q20	14.303333	0.239137	15.161667	0.042622	15.170000	0.107145
20	presto/tpcds: q21	10.133333	0.081158	10.886667	0.150820	10.663333	0.137210
21	presto/tpcds: q22	569.400000	2.762607	582.700000	3.184337	581.900000	1.986957
22	presto/tpcds: q23	10116.000000	32.199379	10596.000000	37.180640	10140.000000	37.180640
23	presto/tpcds: q24	2802.400000	8.977305	2773.400000	11.724845	2801.300000	14.546340
24	presto/tpcds: q25	136.300000	3.568193	135.800000	3.256992	137.600000	4.942874
25	presto/tpcds: q26	134.300000	0.244949	134.500000	0.451664	133.100000	0.244949
26	presto/tpcds: q27	234.500000	1.164474	235.800000	0.657267	238.400000	0.819756
27	presto/tpcds: q28	2695.700000	17.111750	2596.700000	7.154020	2625.800000	12.503440
28	presto/tpcds: q29	276.900000	0.629285	274.400000	0.619677	280.500000	0.328634
29	presto/tpcds: q30	113.900000	0.451664	111.800000	1.402854	110.900000	0.797496
30	presto/tpcds: q31	351.800000	4.321111	362.000000	3.491704	362.700000	4.751000
31	presto/tpcds: q32	27.298333	0.416337	27.695000	0.356693	34.743333	18.841455
32	presto/tpcds: q33	49.350000	0.220363	51.568333	0.273380	52.076667	0.386868
33	presto/tpcds: q34	107.700000	0.501996	107.400000	0.758947	108.100000	0.451664
34	presto/tpcds: q35	172.500000	3.324455	178.300000	5.025933	172.400000	4.884260
35	presto/tpcds: q36	218.600000	0.309839	222.000000	0.657267	223.600000	0.619677

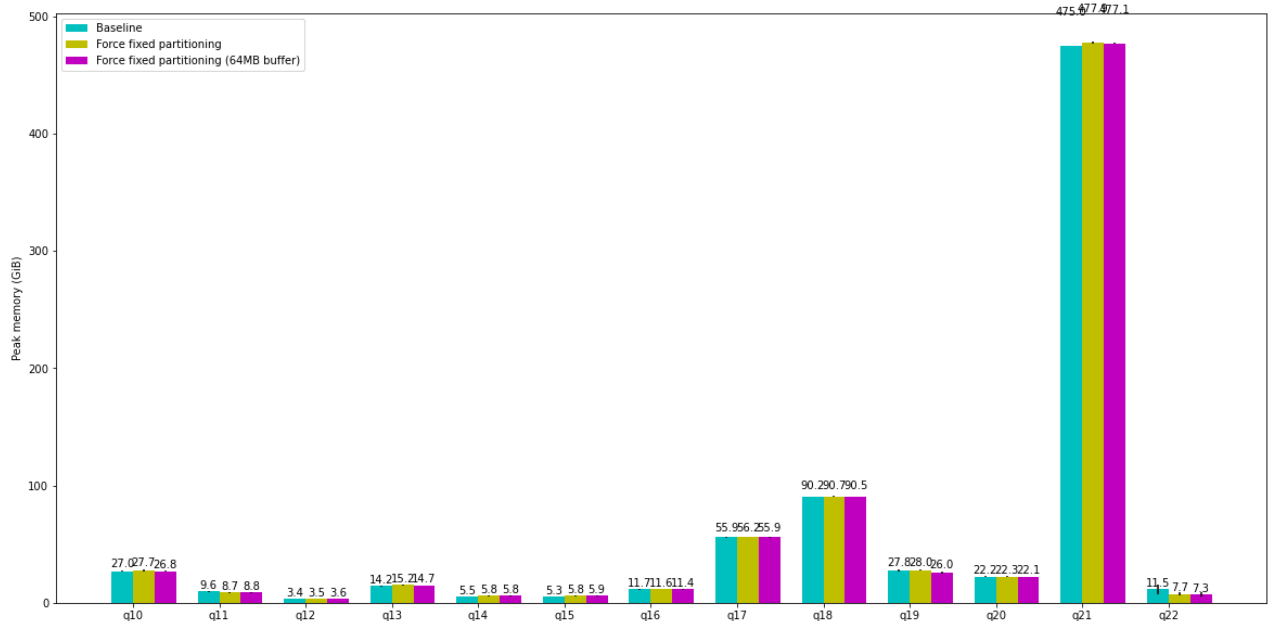
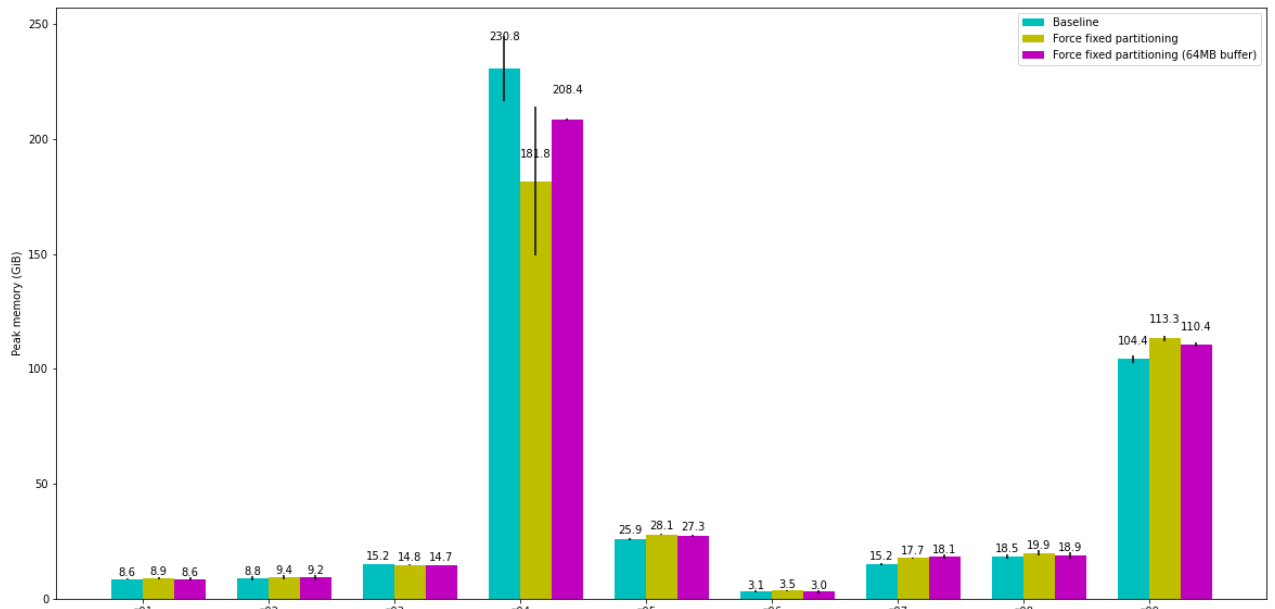
	query	Baseline mean	Baseline std.dev	Force fixed partitioning mean	Force fixed partitioning std.dev	Force fixed partitioning (64MB buffer) mean	Force fixed partitioning (64MB buffer) std.dev
36	presto/tpcds: q37	168.900000	0.501996	169.500000	0.328634	169.500000	0.629285
37	presto/tpcds: q38	1133.000000	6.645299	1127.600000	7.801538	1140.200000	5.072278
38	presto/tpcds: q39	41.220000	0.587129	44.916667	2.405059	44.155000	1.537644
39	presto/tpcds: q40	257.800000	12.933677	222.800000	50.375232	197.200000	76.446373
40	presto/tpcds: q41	0.764667	0.007737	0.792833	0.011107	0.802000	0.014533
41	presto/tpcds: q42	23.851667	0.338314	24.338333	0.594489	24.683333	0.424343
42	presto/tpcds: q43	267.100000	8.239175	264.200000	1.549193	262.300000	2.721029
43	presto/tpcds: q44	1071.300000	14.453650	1051.200000	4.489989	1044.900000	6.127642
44	presto/tpcds: q45	48.008333	0.488975	49.093333	0.344654	48.638333	1.409417
45	presto/tpcds: q46	199.400000	0.903327	196.300000	0.961249	198.400000	1.639512
46	presto/tpcds: q47	4128.000000	18.590320	4056.000000	18.590320	4086.000000	19.718012
47	presto/tpcds: q48	363.000000	1.003992	353.900000	2.442130	360.500000	3.338862
48	presto/tpcds: q49	374.400000	1.138420	368.200000	1.594992	360.700000	4.791242
49	presto/tpcds: q50	609.000000	1.419859	611.400000	5.927563	620.900000	2.352020
50	presto/tpcds: q51	769.500000	3.053523	769.900000	1.913113	781.800000	4.225636
51	presto/tpcds: q52	24.176667	0.354495	24.608333	0.260340	24.435000	0.293036
52	presto/tpcds: q53	126.300000	0.827043	122.800000	0.309839	145.900000	53.747967
53	presto/tpcds: q54	620.600000	1.806654	619.100000	1.224745	623.100000	8.993998
54	presto/tpcds: q55	22.531667	0.049160	22.481667	0.073598	22.415000	0.045056
55	presto/tpcds: q56	24.926667	0.217868	26.250000	0.148189	26.468333	0.073052
56	presto/tpcds: q57	2008.300000	7.103520	2029.700000	3.161645	2015.400000	2.244994
57	presto/tpcds: q58	40.490000	0.480042	40.255000	1.077492	40.106667	0.774252

	query	Baseline mean	Baseline std.dev	Force fixed partitioning mean	Force fixed partitioning std.dev	Force fixed partitioning (64MB buffer) mean	Force fixed partitioning (64MB buffer) std.dev
58	presto/tpcds: q59	2298.400000	3.322650	2305.100000	4.997199	2299.900000	5.709991
59	presto/tpcds: q60	68.700000	0.328634	70.000000	0.309839	70.900000	0.244949
60	presto/tpcds: q61	144.100000	0.701427	140.200000	4.626878	140.500000	3.588314
61	presto/tpcds: q62	286.800000	2.369810	291.800000	2.955673	292.900000	2.799286
62	presto/tpcds: q63	122.300000	0.797496	120.600000	0.657267	169.100000	72.351558
63	presto/tpcds: q64	4848.000000	18.590320	5238.000000	19.718012	4920.000000	43.598165
64	presto/tpcds: q65	1481.800000	10.208232	1430.800000	9.159913	1499.800000	16.452112
65	presto/tpcds: q66	210.000000	0.758947	215.400000	0.848528	220.000000	0.819756
66	presto/tpcds: q67	8034.000000	47.849765	8004.000000	37.180640	7968.000000	43.598165
67	presto/tpcds: q68	59.275000	0.421034	58.495000	0.259056	59.376667	0.240804
68	presto/tpcds: q69	40.208333	0.258257	39.770000	0.548197	39.645000	0.272158
69	presto/tpcds: q70	1082.700000	23.827631	1040.300000	31.249384	1061.100000	22.054387
70	presto/tpcds: q71	57.573333	1.046282	59.856667	1.643882	60.053333	1.152088
71	presto/tpcds: q72	1243.800000	28.842469	1254.600000	18.007998	1228.000000	6.752777
72	presto/tpcds: q73	35.365000	0.161338	36.180000	0.199600	36.106667	0.190438
73	presto/tpcds: q74	1869.200000	9.001333	1904.400000	6.724284	1871.900000	7.001428
74	presto/tpcds: q75	1822.500000	21.401589	1787.800000	9.354357	1844.100000	8.457659
75	presto/tpcds: q76	580.600000	4.839835	571.000000	1.453272	577.800000	2.517141
76	presto/tpcds: q77	46.475000	0.349728	47.303333	0.217960	46.558333	0.206825
77	presto/tpcds: q78	3156.100000	12.496239	3358.100000	79.755702	3259.900000	45.167555
78	presto/tpcds: q79	191.700000	1.809972	192.500000	2.022869	193.700000	1.389964
79	presto/tpcds: q80	598.500000	132.077296	604.300000	190.380451	595.200000	182.594107

	query	Baseline mean	Baseline std.dev	Force fixed partitioning mean	Force fixed partitioning std.dev	Force fixed partitioning (64MB buffer) mean	Force fixed partitioning (64MB buffer) std.dev
80	presto/tpcds: q81	224.300000	0.961249	221.300000	1.224745	219.700000	2.160555
81	presto/tpcds: q82	352.300000	0.701427	352.100000	0.701427	353.800000	0.619677
82	presto/tpcds: q83	10.243333	0.255630	11.960000	0.420619	12.141667	0.543780
83	presto/tpcds: q84	87.700000	0.589915	90.600000	0.379473	88.000000	0.726636
84	presto/tpcds: q85	227.600000	6.942046	230.900000	4.909990	230.800000	4.270831
85	presto/tpcds: q86	183.200000	0.726636	181.400000	0.489898	178.900000	0.451664
86	presto/tpcds: q87	1144.100000	1.986957	1140.300000	4.855924	1148.600000	3.573234
87	presto/tpcds: q88	3488.900000	7.526752	3517.300000	4.544447	3549.700000	6.718035
88	presto/tpcds: q89	235.500000	0.328634	238.900000	0.451664	236.300000	0.451664
89	presto/tpcds: q90	220.900000	0.451664	223.200000	0.000000	229.500000	0.328634
90	presto/tpcds: q91	10.523333	0.318350	11.715000	1.002911	11.580000	1.366338
91	presto/tpcds: q92	19.920000	9.627461	16.293333	0.396518	16.396667	1.392719
92	presto/tpcds: q93	2969.900000	7.042443	2990.700000	8.750543	2902.800000	8.752600
93	presto/tpcds: q94	223.200000	1.138420	224.700000	0.734847	228.100000	1.389964
94	presto/tpcds: q95	1203.400000	6.266099	1264.500000	7.912269	1297.600000	11.712557
95	presto/tpcds: q96	412.500000	0.501996	419.100000	0.501996	419.900000	0.589915
96	presto/tpcds: q97	1144.000000	20.762659	1143.500000	25.930600	1154.600000	18.272602
97	presto/tpcds: q98	23.015000	0.180527	24.253333	0.268154	24.260000	0.158240
98	presto/tpcds: q99	594.900000	1.643168	602.300000	1.164474	609.700000	0.797496

TPC-H Comparison (peak Memory)

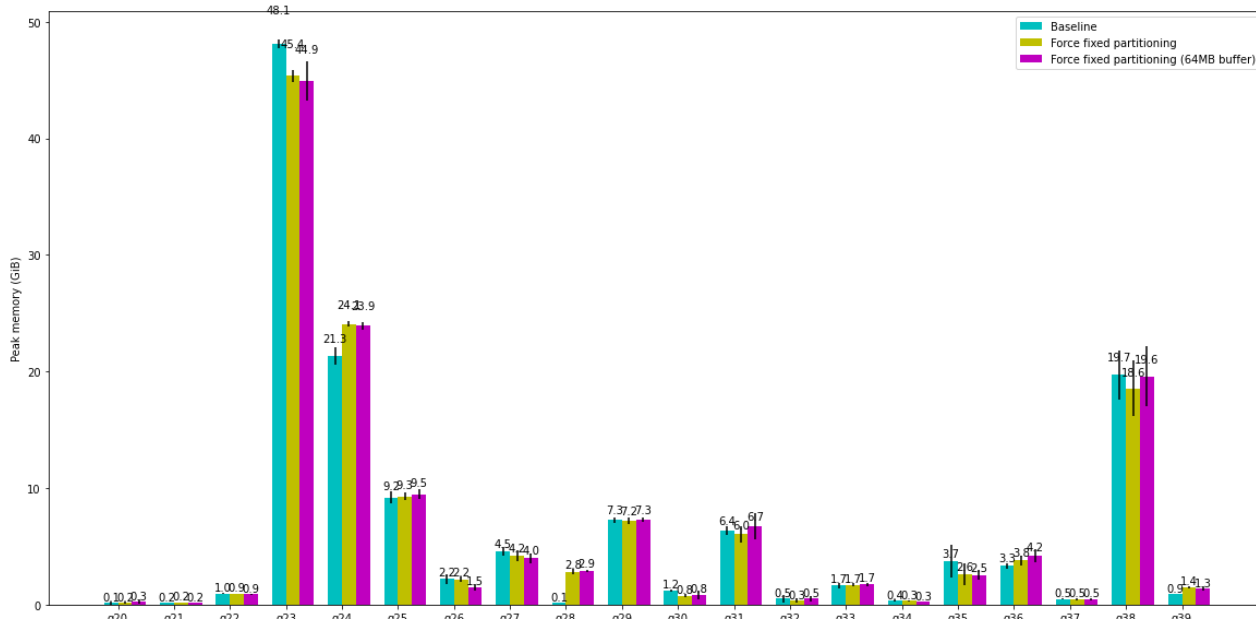
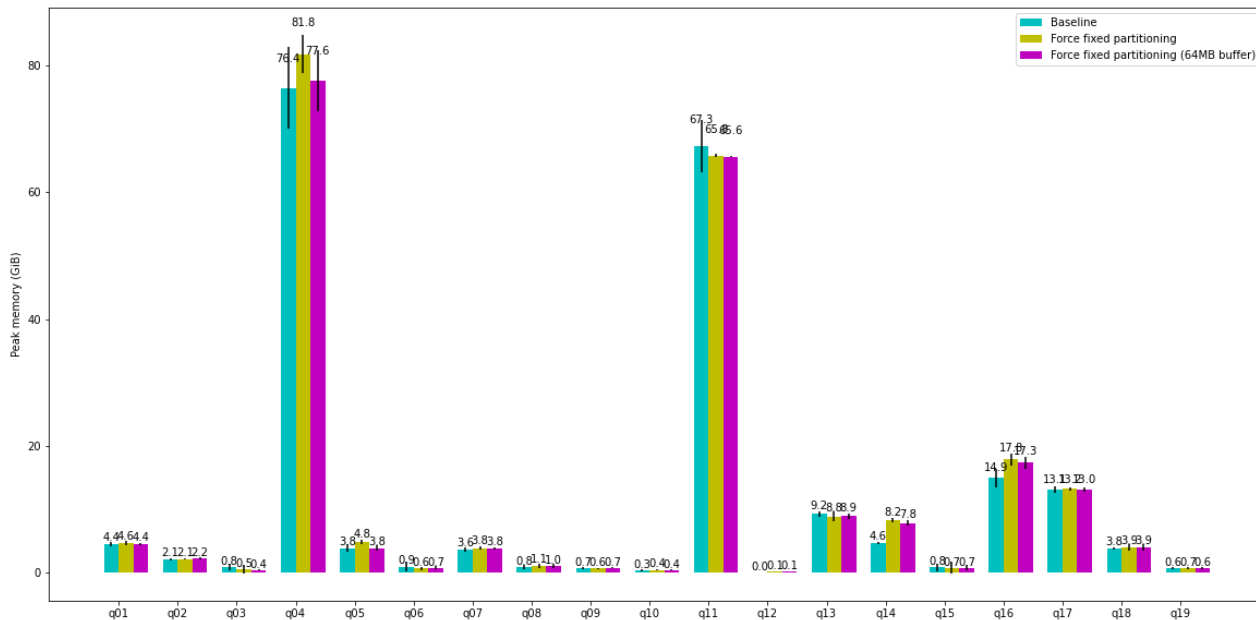
Benchmarks comparison-Andrii



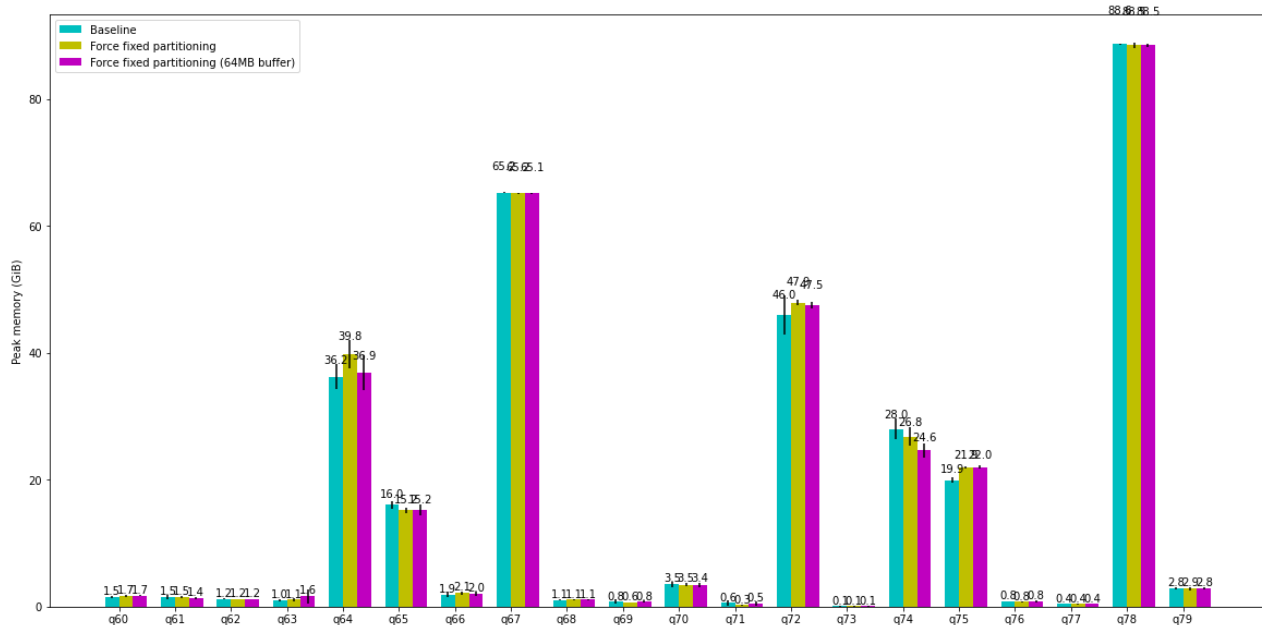
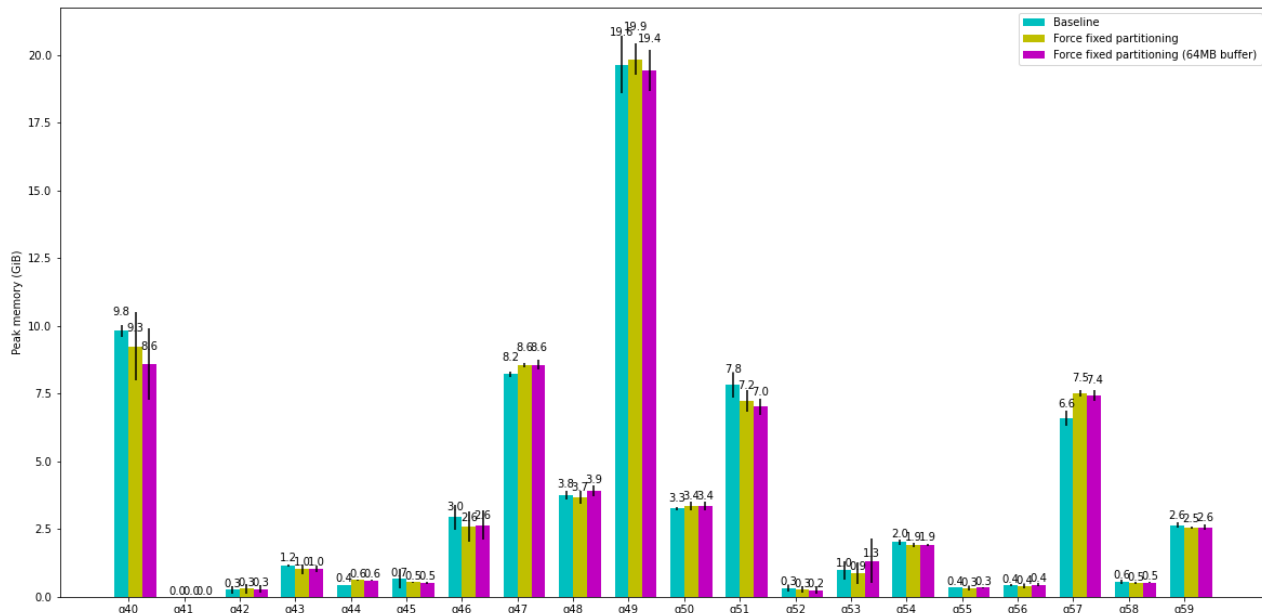
query	Baseline mean	Baseline std.dev	Force fixed partitioning mean	Force fixed partitioning std.dev	Force fixed partitioning (64MB buffer) mean	Force fixed partitioning (64MB buffer) std.dev
0 presto/tpch: q01	8.649 GiB	402.959 MiB	8.850 GiB	426.384 MiB	8.623 GiB	868.591 MiB
1 presto/tpch: q02	8.829 GiB	0.942 GiB	9.408 GiB	774.538 MiB	9.189 GiB	1.024 GiB
2 presto/tpch: q03	15.158 GiB	60.271 MiB	14.792 GiB	54.199 MiB	14.652 GiB	49.499 MiB
3 presto/tpch: q04	230.792 GiB	14.155 GiB	181.756 GiB	32.571 GiB	208.434 GiB	506.410 MiB
4 presto/tpch: q05	25.852 GiB	399.166 MiB	28.051 GiB	253.864 MiB	27.292 GiB	580.241 MiB
5 presto/tpch: q06	3.086 GiB	548.259 MiB	3.488 GiB	399.711 MiB	3.048 GiB	624.919 MiB

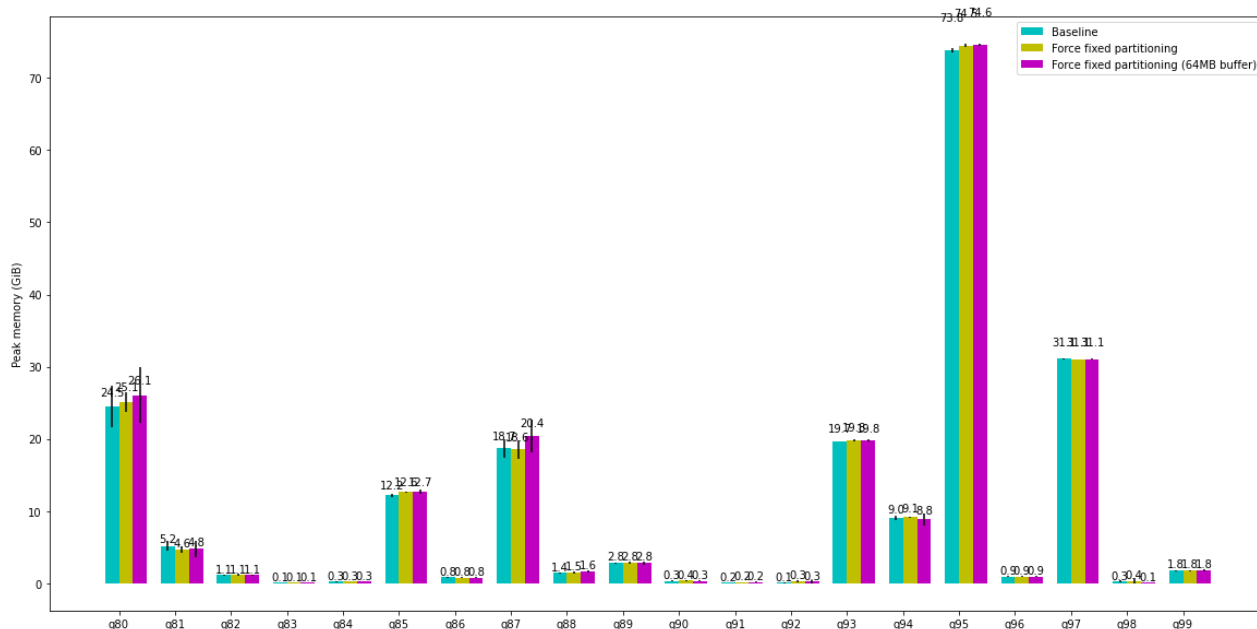
	query	Baseline mean	Baseline std.dev	Force fixed partitioning mean	Force fixed partitioning std.dev	Force fixed partitioning (64MB buffer) mean	Force fixed partitioning (64MB buffer) std.dev
6	presto/tpch: q07	15.185 GiB	534.194 MiB	17.678 GiB	358.301 MiB	18.142 GiB	0.931 GiB
7	presto/tpch: q08	18.468 GiB	868.423 MiB	19.911 GiB	1.177 GiB	18.864 GiB	1.293 GiB
8	presto/tpch: q09	104.365 GiB	1.646 GiB	113.295 GiB	1.219 GiB	110.425 GiB	0.960 GiB
9	presto/tpch: q10	27.040 GiB	264.148 MiB	27.718 GiB	672.263 MiB	26.806 GiB	463.357 MiB
10	presto/tpch: q11	9.595 GiB	678.999 MiB	8.731 GiB	601.185 MiB	8.806 GiB	424.602 MiB
11	presto/tpch: q12	3.397 GiB	237.897 MiB	3.547 GiB	395.533 MiB	3.583 GiB	361.921 MiB
12	presto/tpch: q13	14.158 GiB	181.814 MiB	15.166 GiB	137.120 MiB	14.716 GiB	126.464 MiB
13	presto/tpch: q14	5.476 GiB	92.810 MiB	5.836 GiB	92.968 MiB	5.850 GiB	59.566 MiB
14	presto/tpch: q15	5.283 GiB	53.197 MiB	5.840 GiB	59.866 MiB	5.872 GiB	117.682 MiB
15	presto/tpch: q16	11.680 GiB	322.211 MiB	11.552 GiB	149.733 MiB	11.415 GiB	127.174 MiB
16	presto/tpch: q17	55.915 GiB	364.532 MiB	56.230 GiB	439.851 MiB	55.879 GiB	503.500 MiB
17	presto/tpch: q18	90.216 GiB	161.112 MiB	90.678 GiB	223.413 MiB	90.503 GiB	161.369 MiB
18	presto/tpch: q19	27.780 GiB	771.448 MiB	28.015 GiB	920.000 MiB	26.028 GiB	921.393 MiB
19	presto/tpch: q20	22.180 GiB	362.169 MiB	22.345 GiB	181.479 MiB	22.076 GiB	283.723 MiB
20	presto/tpch: q21	475.046 GiB	335.304 MiB	477.940 GiB	769.989 MiB	477.092 GiB	345.934 MiB
21	presto/tpch: q22	11.484 GiB	4.505 GiB	7.662 GiB	1.400 GiB	7.346 GiB	2.098 GiB

TPC-DS Comparison (peak Memory)



Benchmarks comparison-Andrii





query	Baseline mean	Baseline std.dev	Force fixed partitioning mean	Force fixed partitioning std.dev	Force fixed partitioning (64MB buffer) mean	Force fixed partitioning (64MB buffer) std.dev
0 presto/tpcds: q01	4.430 GiB	364.303 MiB	4.605 GiB	323.986 MiB	4.429 GiB	225.090 MiB
1 presto/tpcds: q02	2.109 GiB	171.850 MiB	2.118 GiB	108.467 MiB	2.168 GiB	142.334 MiB
2 presto/tpcds: q03	858.943 MiB	522.350 MiB	520.097 MiB	638.330 MiB	373.896 MiB	123.109 MiB
3 presto/tpcds: q04	76.444 GiB	6.449 GiB	79.606 GiB	4.177 GiB	77.577 GiB	4.831 GiB
4 presto/tpcds: q05	3.824 GiB	595.348 MiB	4.832 GiB	372.613 MiB	3.799 GiB	459.314 MiB
5 presto/tpcds: q06	907.852 MiB	789.898 MiB	615.558 MiB	212.653 MiB	724.614 MiB	286.996 MiB
6 presto/tpcds: q07	3.608 GiB	307.962 MiB	3.832 GiB	267.919 MiB	3.751 GiB	127.626 MiB
7 presto/tpcds: q08	818.375 MiB	367.945 MiB	1.058 GiB	339.148 MiB	1.030 GiB	389.146 MiB
8 presto/tpcds: q09	718.972 MiB	138.990 MiB	622.832 MiB	49.881 MiB	721.304 MiB	106.678 MiB
9 presto/tpcds: q10	335.769 MiB	120.463 MiB	399.281 MiB	72.857 MiB	363.520 MiB	60.699 MiB
10 presto/tpcds: q11	67.268 GiB	4.081 GiB	65.802 GiB	231.401 MiB	65.613 GiB	105.809 MiB
11 presto/tpcds: q12	38.197 MiB	15.195 MiB	111.079 MiB	33.668 MiB	101.076 MiB	18.804 MiB
12 presto/tpcds: q13	9.208 GiB	447.919 MiB	9.089 GiB	453.779 MiB	8.860 GiB	381.018 MiB
13 presto/tpcds: q14	4.613 GiB	154.320 MiB	7.813 GiB	342.933 MiB	7.791 GiB	421.394 MiB

	query	Baseline mean	Baseline std.dev	Force fixed partitioning mean	Force fixed partitioning std.dev	Force fixed partitioning (64MB buffer) mean	Force fixed partitioning (64MB buffer) std.dev
14	presto/tpcds: q15	783.452 MiB	685.494 MiB	714.304 MiB	933.624 MiB	699.130 MiB	443.737 MiB
15	presto/tpcds: q16	14.890 GiB	1.507 GiB	17.792 GiB	924.282 MiB	17.325 GiB	0.927 GiB
16	presto/tpcds: q17	13.090 GiB	575.908 MiB	13.096 GiB	384.706 MiB	13.046 GiB	366.584 MiB
17	presto/tpcds: q18	3.787 GiB	187.678 MiB	4.234 GiB	216.594 MiB	3.910 GiB	469.819 MiB
18	presto/tpcds: q19	658.943 MiB	212.618 MiB	698.627 MiB	207.327 MiB	633.874 MiB	199.055 MiB
19	presto/tpcds: q20	125.821 MiB	112.802 MiB	175.049 MiB	128.626 MiB	264.889 MiB	157.577 MiB
20	presto/tpcds: q21	177.009 MiB	38.965 MiB	198.846 MiB	21.124 MiB	187.067 MiB	24.892 MiB
21	presto/tpcds: q22	0.956 GiB	16.267 MiB	0.939 GiB	14.595 MiB	906.377 MiB	32.048 MiB
22	presto/tpcds: q23	48.100 GiB	378.853 MiB	45.372 GiB	516.491 MiB	44.925 GiB	1.655 GiB
23	presto/tpcds: q24	21.321 GiB	734.935 MiB	24.078 GiB	231.580 MiB	23.918 GiB	354.410 MiB
24	presto/tpcds: q25	9.201 GiB	498.493 MiB	9.287 GiB	337.682 MiB	9.477 GiB	471.757 MiB
25	presto/tpcds: q26	2.196 GiB	414.882 MiB	2.162 GiB	267.661 MiB	1.490 GiB	265.603 MiB
26	presto/tpcds: q27	4.548 GiB	396.291 MiB	4.174 GiB	463.442 MiB	3.976 GiB	453.839 MiB
27	presto/tpcds: q28	128.103 MiB	1.909 MiB	2.812 GiB	220.050 MiB	2.887 GiB	111.074 MiB
28	presto/tpcds: q29	7.256 GiB	240.449 MiB	7.183 GiB	303.592 MiB	7.266 GiB	186.911 MiB
29	presto/tpcds: q30	1.193 GiB	96.769 MiB	779.660 MiB	160.951 MiB	837.883 MiB	385.250 MiB
30	presto/tpcds: q31	6.357 GiB	409.413 MiB	6.035 GiB	749.016 MiB	6.710 GiB	1.135 GiB
31	presto/tpcds: q32	511.777 MiB	327.899 MiB	337.748 MiB	196.544 MiB	516.218 MiB	236.230 MiB
32	presto/tpcds: q33	1.653 GiB	240.356 MiB	2.026 GiB	68.721 MiB	1.718 GiB	101.785 MiB
33	presto/tpcds: q34	361.947 MiB	80.001 MiB	333.387 MiB	58.577 MiB	279.780 MiB	18.549 MiB
34	presto/tpcds: q35	3.732 GiB	1.396 GiB	2.626 GiB	0.928 GiB	2.548 GiB	451.961 MiB
35	presto/tpcds: q36	3.341 GiB	237.768 MiB	3.662 GiB	483.860 MiB	4.221 GiB	580.643 MiB

	query	Baseline mean	Baseline std.dev	Force fixed partitioning mean	Force fixed partitioning std.dev	Force fixed partitioning (64MB buffer) mean	Force fixed partitioning (64MB buffer) std.dev
36	presto/tpcds: q37	502.495 MiB	25.302 MiB	471.679 MiB	87.442 MiB	481.979 MiB	97.143 MiB
37	presto/tpcds: q38	19.728 GiB	2.113 GiB	20.303 GiB	2.763 GiB	19.577 GiB	2.584 GiB
38	presto/tpcds: q39	916.519 MiB	21.327 MiB	1.383 GiB	91.313 MiB	1.344 GiB	186.827 MiB
39	presto/tpcds: q40	9.818 GiB	219.551 MiB	9.254 GiB	1.265 GiB	8.603 GiB	1.322 GiB
40	presto/tpcds: q41	150.214 KiB	31.282 KiB	820.841 KiB	125.560 YiB	839.817 KiB	40.054 KiB
41	presto/tpcds: q42	263.244 MiB	128.433 MiB	306.646 MiB	172.929 MiB	287.134 MiB	146.078 MiB
42	presto/tpcds: q43	1.163 GiB	45.480 MiB	1.020 GiB	185.785 MiB	1.031 GiB	116.673 MiB
43	presto/tpcds: q44	450.601 MiB	682.171 KiB	634.993 MiB	17.824 MiB	626.688 MiB	28.764 MiB
44	presto/tpcds: q45	671.840 MiB	369.233 MiB	557.366 MiB	22.307 MiB	524.384 MiB	45.150 MiB
45	presto/tpcds: q46	2.950 GiB	468.922 MiB	2.593 GiB	561.132 MiB	2.644 GiB	549.350 MiB
46	presto/tpcds: q47	8.219 GiB	111.712 MiB	8.448 GiB	56.509 MiB	8.572 GiB	166.587 MiB
47	presto/tpcds: q48	3.766 GiB	161.070 MiB	3.664 GiB	245.371 MiB	3.906 GiB	205.333 MiB
48	presto/tpcds: q49	19.649 GiB	1.065 GiB	19.855 GiB	602.338 MiB	19.437 GiB	769.341 MiB
49	presto/tpcds: q50	3.261 GiB	55.605 MiB	3.351 GiB	159.092 MiB	3.351 GiB	155.387 MiB
50	presto/tpcds: q51	7.820 GiB	475.068 MiB	7.231 GiB	424.918 MiB	7.018 GiB	317.000 MiB
51	presto/tpcds: q52	336.541 MiB	125.047 MiB	278.363 MiB	110.732 MiB	246.219 MiB	149.227 MiB
52	presto/tpcds: q53	0.975 GiB	338.887 MiB	880.930 MiB	413.042 MiB	1.325 GiB	836.571 MiB
53	presto/tpcds: q54	2.022 GiB	99.151 MiB	1.902 GiB	82.076 MiB	1.905 GiB	42.505 MiB
54	presto/tpcds: q55	362.610 MiB	3.380 MiB	304.565 MiB	81.372 MiB	350.328 MiB	26.734 MiB
55	presto/tpcds: q56	426.987 MiB	40.152 MiB	391.658 MiB	75.804 MiB	457.386 MiB	66.810 MiB
56	presto/tpcds: q57	6.596 GiB	283.147 MiB	7.499 GiB	122.791 MiB	7.420 GiB	204.305 MiB
57	presto/tpcds: q58	579.666 MiB	80.494 MiB	518.319 MiB	43.836 MiB	539.792 MiB	31.121 MiB

	query	Baseline mean	Baseline std.dev	Force fixed partitioning mean	Force fixed partitioning std.dev	Force fixed partitioning (64MB buffer) mean	Force fixed partitioning (64MB buffer) std.dev
58	presto/tpcds: q59	2.642 GiB	98.883 MiB	2.546 GiB	44.603 MiB	2.571 GiB	98.029 MiB
59	presto/tpcds: q60	1.510 GiB	133.346 MiB	1.707 GiB	125.735 MiB	1.727 GiB	54.209 MiB
60	presto/tpcds: q61	1.528 GiB	289.371 MiB	1.478 GiB	149.418 MiB	1.360 GiB	119.755 MiB
61	presto/tpcds: q62	1.239 GiB	37.466 MiB	1.175 GiB	40.018 MiB	1.181 GiB	20.859 MiB
62	presto/tpcds: q63	1.026 GiB	179.263 MiB	1.087 GiB	203.798 MiB	1.623 GiB	1.154 GiB
63	presto/tpcds: q64	36.249 GiB	1.966 GiB	39.761 GiB	2.241 GiB	36.875 GiB	2.676 GiB
64	presto/tpcds: q65	16.044 GiB	601.697 MiB	15.240 GiB	439.461 MiB	15.202 GiB	890.015 MiB
65	presto/tpcds: q66	1.892 GiB	476.876 MiB	2.130 GiB	209.178 MiB	1.974 GiB	337.501 MiB
66	presto/tpcds: q67	65.232 GiB	63.054 MiB	65.170 GiB	87.398 MiB	65.123 GiB	36.879 MiB
67	presto/tpcds: q68	1.059 GiB	86.838 MiB	1.089 GiB	149.981 MiB	1.109 GiB	136.822 MiB
68	presto/tpcds: q69	791.686 MiB	337.419 MiB	657.863 MiB	62.858 MiB	783.845 MiB	169.078 MiB
69	presto/tpcds: q70	3.517 GiB	411.220 MiB	3.476 GiB	315.774 MiB	3.435 GiB	361.862 MiB
70	presto/tpcds: q71	596.541 MiB	443.570 MiB	299.889 MiB	87.507 MiB	509.455 MiB	291.621 MiB
71	presto/tpcds: q72	45.960 GiB	3.129 GiB	47.939 GiB	473.368 MiB	47.534 GiB	573.767 MiB
72	presto/tpcds: q73	66.883 MiB	27.462 MiB	61.906 MiB	30.529 MiB	95.468 MiB	56.916 MiB
73	presto/tpcds: q74	28.022 GiB	1.624 GiB	26.826 GiB	1.385 GiB	24.611 GiB	1.126 GiB
74	presto/tpcds: q75	19.915 GiB	440.923 MiB	21.919 GiB	239.910 MiB	22.017 GiB	219.026 MiB
75	presto/tpcds: q76	867.876 MiB	56.928 MiB	768.724 MiB	110.561 MiB	853.639 MiB	151.339 MiB
76	presto/tpcds: q77	446.077 MiB	25.827 MiB	423.646 MiB	65.220 MiB	442.222 MiB	12.611 MiB
77	presto/tpcds: q78	88.626 GiB	130.383 MiB	88.463 GiB	412.341 MiB	88.522 GiB	251.801 MiB
78	presto/tpcds: q79	2.826 GiB	166.834 MiB	2.870 GiB	249.659 MiB	2.809 GiB	178.099 MiB
79	presto/tpcds: q80	24.471 GiB	2.900 GiB	25.136 GiB	1.334 GiB	26.063 GiB	3.841 GiB

	query	Baseline mean	Baseline std.dev	Force fixed partitioning mean	Force fixed partitioning std.dev	Force fixed partitioning (64MB buffer) mean	Force fixed partitioning (64MB buffer) std.dev
80	presto/tpcds: q81	5.186 GiB	687.198 MiB	4.627 GiB	481.268 MiB	4.758 GiB	1.091 GiB
81	presto/tpcds: q82	1.126 GiB	60.781 MiB	1.126 GiB	155.670 MiB	1.124 GiB	75.433 MiB
82	presto/tpcds: q83	133.032 MiB	7.746 MiB	138.022 MiB	12.272 MiB	123.358 MiB	7.947 MiB
83	presto/tpcds: q84	270.303 MiB	58.346 MiB	285.611 MiB	31.409 MiB	300.039 MiB	47.384 MiB
84	presto/tpcds: q85	12.171 GiB	181.932 MiB	12.649 GiB	115.221 MiB	12.675 GiB	263.320 MiB
85	presto/tpcds: q86	864.778 MiB	68.680 MiB	834.188 MiB	77.101 MiB	836.524 MiB	72.489 MiB
86	presto/tpcds: q87	18.725 GiB	1.287 GiB	18.558 GiB	1.295 GiB	20.397 GiB	2.259 GiB
87	presto/tpcds: q88	1.432 GiB	95.388 MiB	1.468 GiB	130.990 MiB	1.646 GiB	137.317 MiB
88	presto/tpcds: q89	2.848 GiB	92.008 MiB	2.815 GiB	142.454 MiB	2.795 GiB	174.287 MiB
89	presto/tpcds: q90	341.639 MiB	39.530 MiB	392.703 MiB	72.395 MiB	352.474 MiB	53.063 MiB
90	presto/tpcds: q91	161.521 MiB	32.874 MiB	169.942 MiB	16.604 MiB	198.707 MiB	44.245 MiB
91	presto/tpcds: q92	98.029 MiB	43.747 MiB	337.228 MiB	135.160 MiB	290.742 MiB	229.429 MiB
92	presto/tpcds: q93	19.660 GiB	72.380 MiB	19.817 GiB	206.371 MiB	19.753 GiB	146.181 MiB
93	presto/tpcds: q94	9.024 GiB	297.714 MiB	9.142 GiB	46.922 MiB	8.845 GiB	837.192 MiB
94	presto/tpcds: q95	73.837 GiB	327.370 MiB	74.466 GiB	275.972 MiB	74.552 GiB	153.340 MiB
95	presto/tpcds: q96	0.922 GiB	59.369 MiB	0.929 GiB	66.647 MiB	0.948 GiB	57.016 MiB
96	presto/tpcds: q97	31.094 GiB	56.352 MiB	31.071 GiB	428.626 KiB	31.076 GiB	5.678 MiB
97	presto/tpcds: q98	298.545 MiB	182.730 MiB	363.712 MiB	389.521 MiB	111.065 MiB	14.018 MiB
98	presto/tpcds: q99	1.775 GiB	55.258 MiB	1.752 GiB	78.199 MiB	1.818 GiB	120.684 MiB