

FAILED QUERIES

Baseline unpartitioned

benchmark query mean_duration std_dev

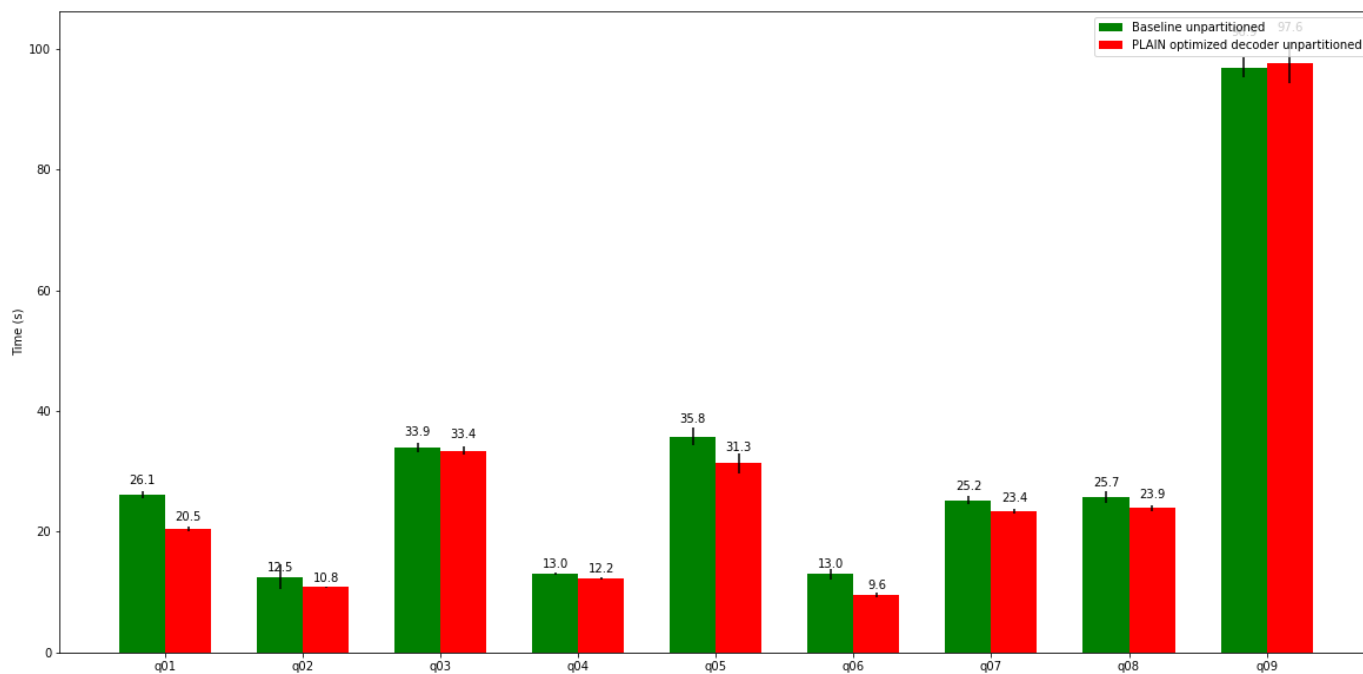
PLAIN optimized decoder unpartitioned

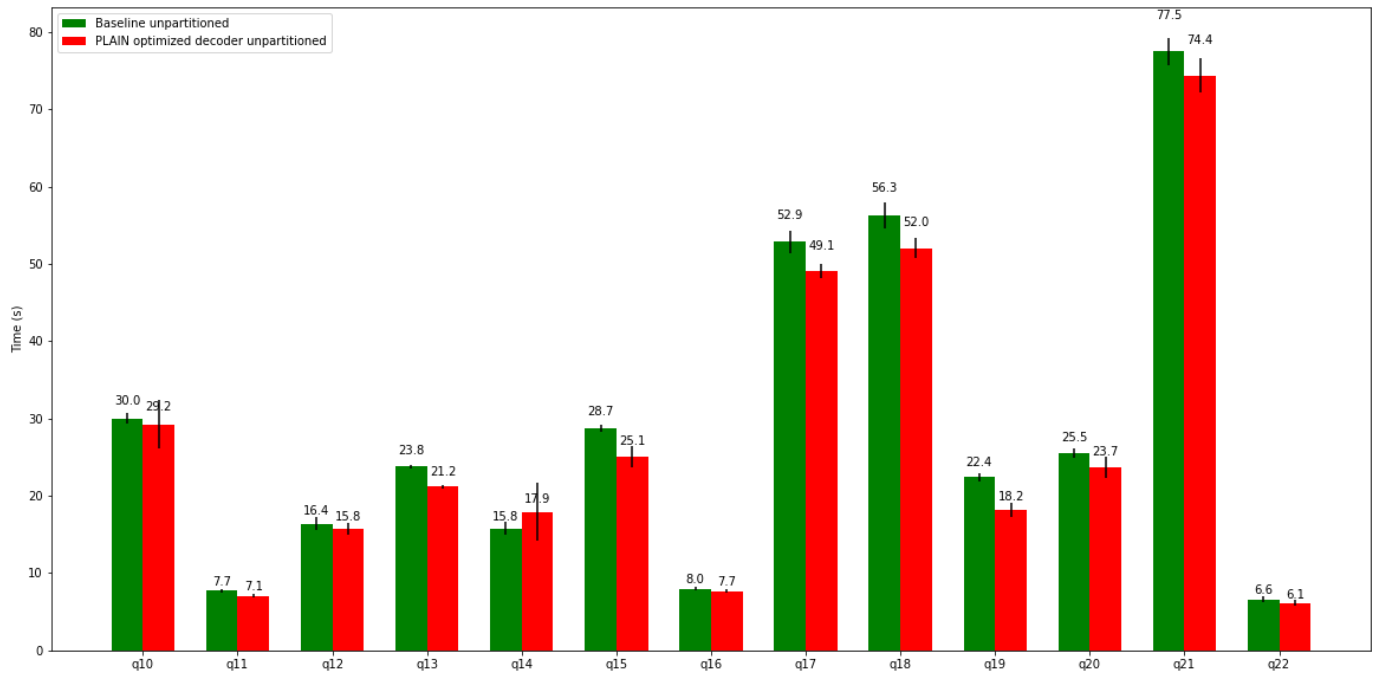
benchmark query mean_duration std_dev

SUMMARY

	label	TPCH wall time	TPC-DS wall time	TPCH CPU time	TPC-DS CPU time	TPCH physicalInputDataSize	physicalI
0	Baseline unpartitioned	653.674333	1443.207333	66084.600000	188766.851500	1.693 TiB	
1	PLAIN optimized decoder unpartitioned	610.173167	1325.525833	50423.500000	157118.852333	1.693 TiB	

TPC-H Comparison (DURATION)

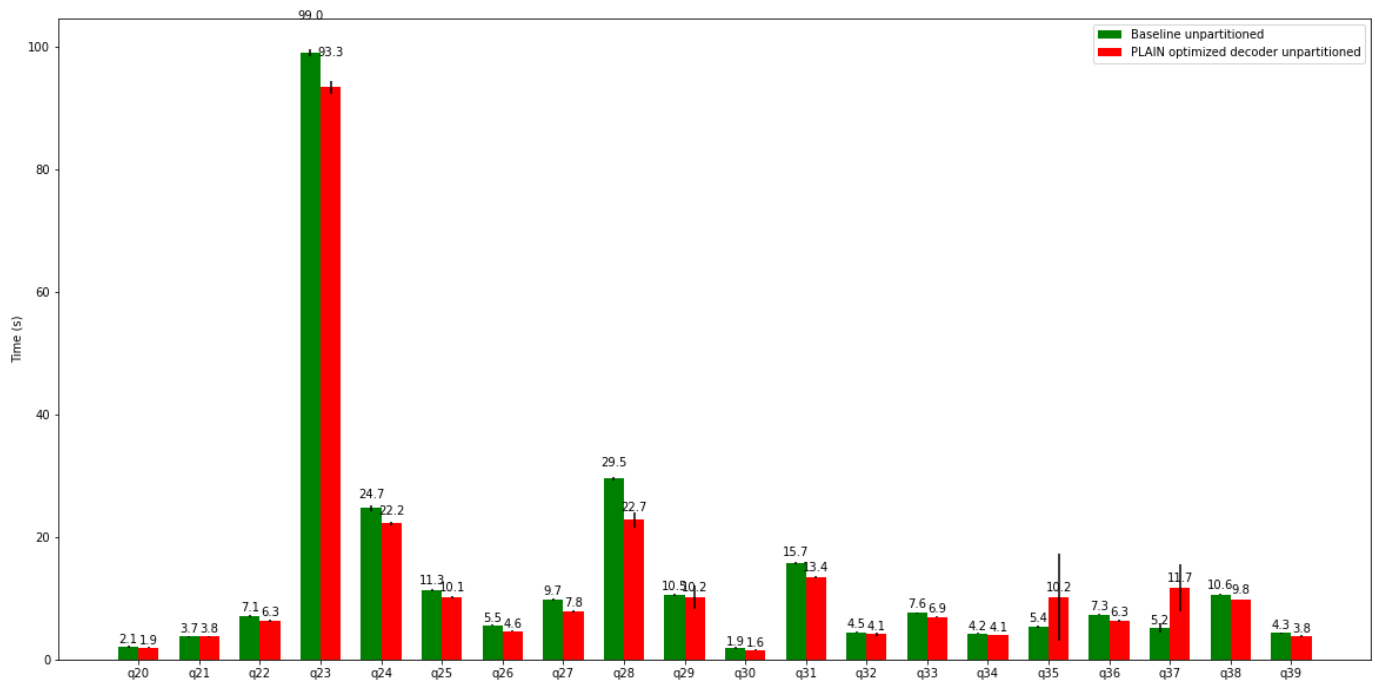
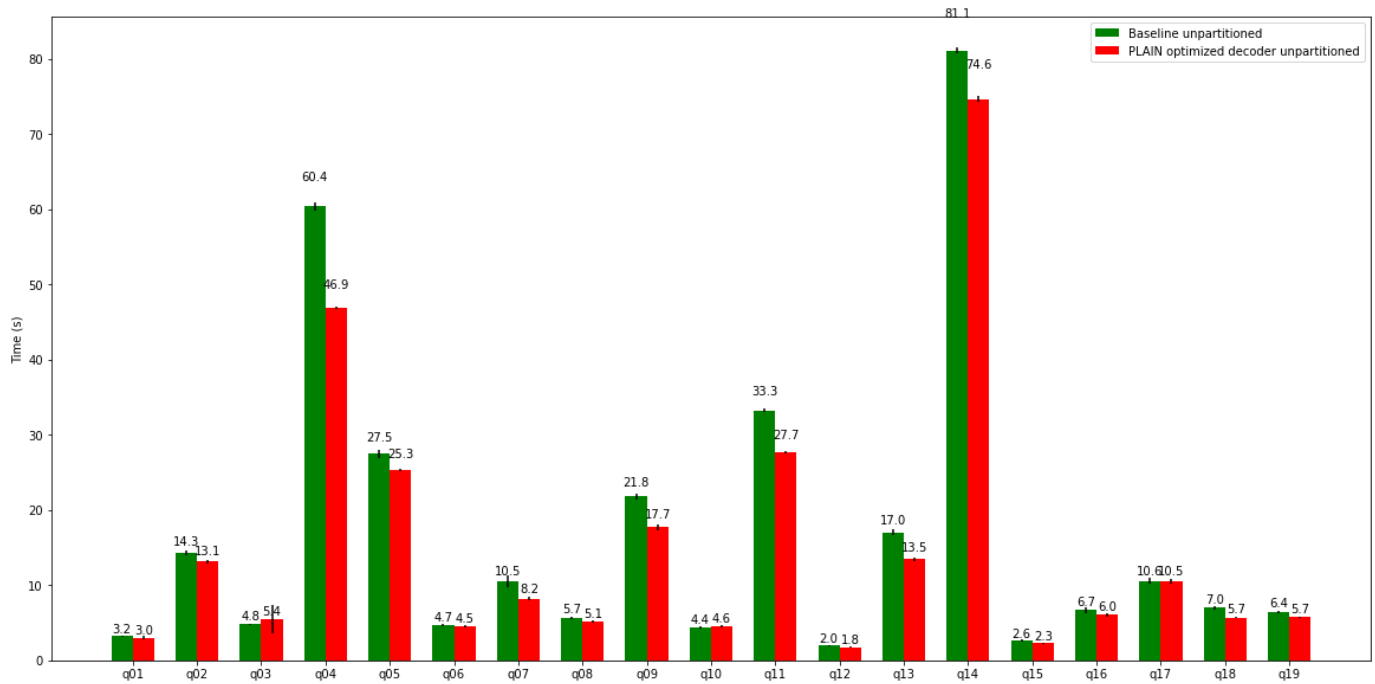


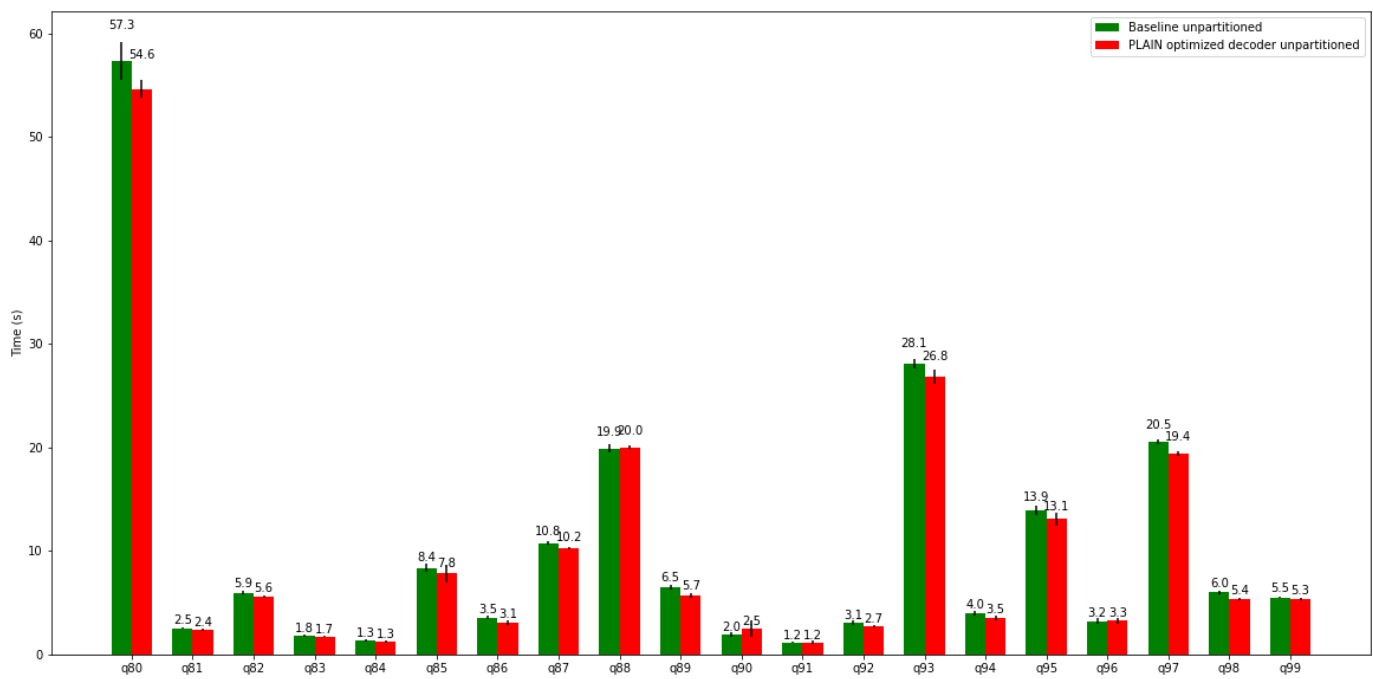
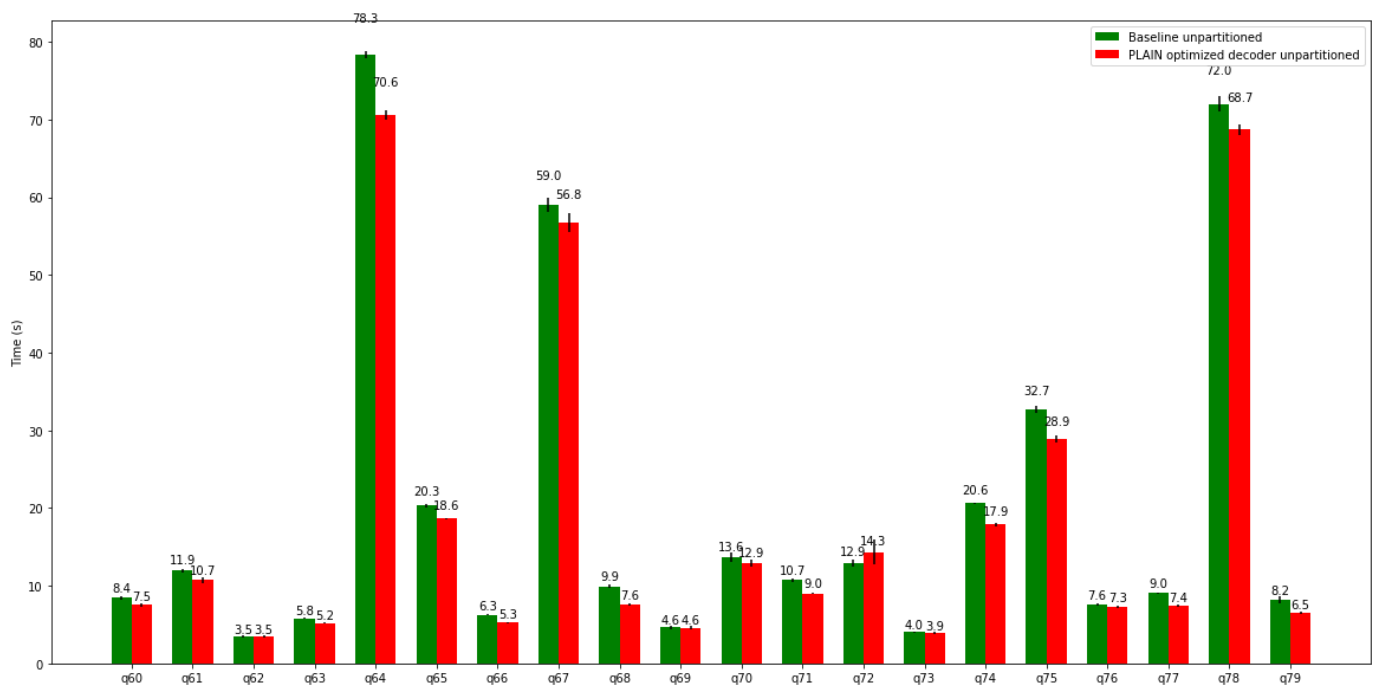
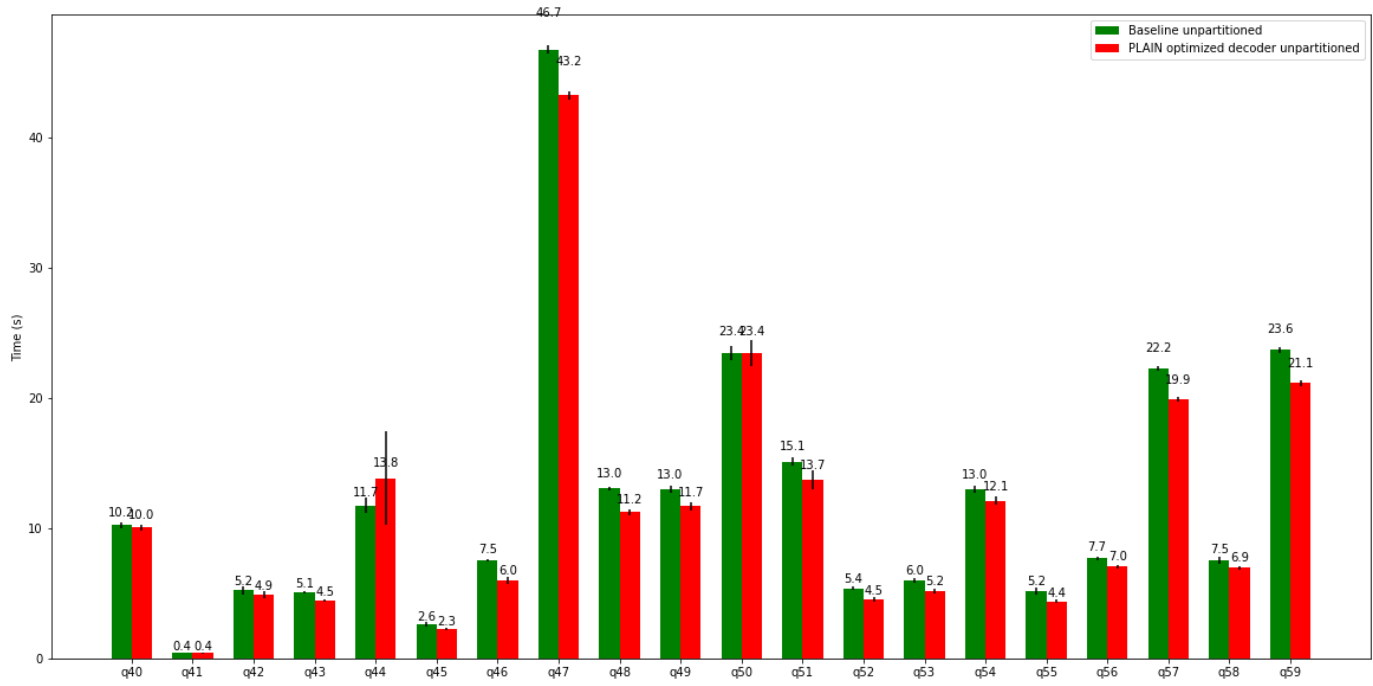


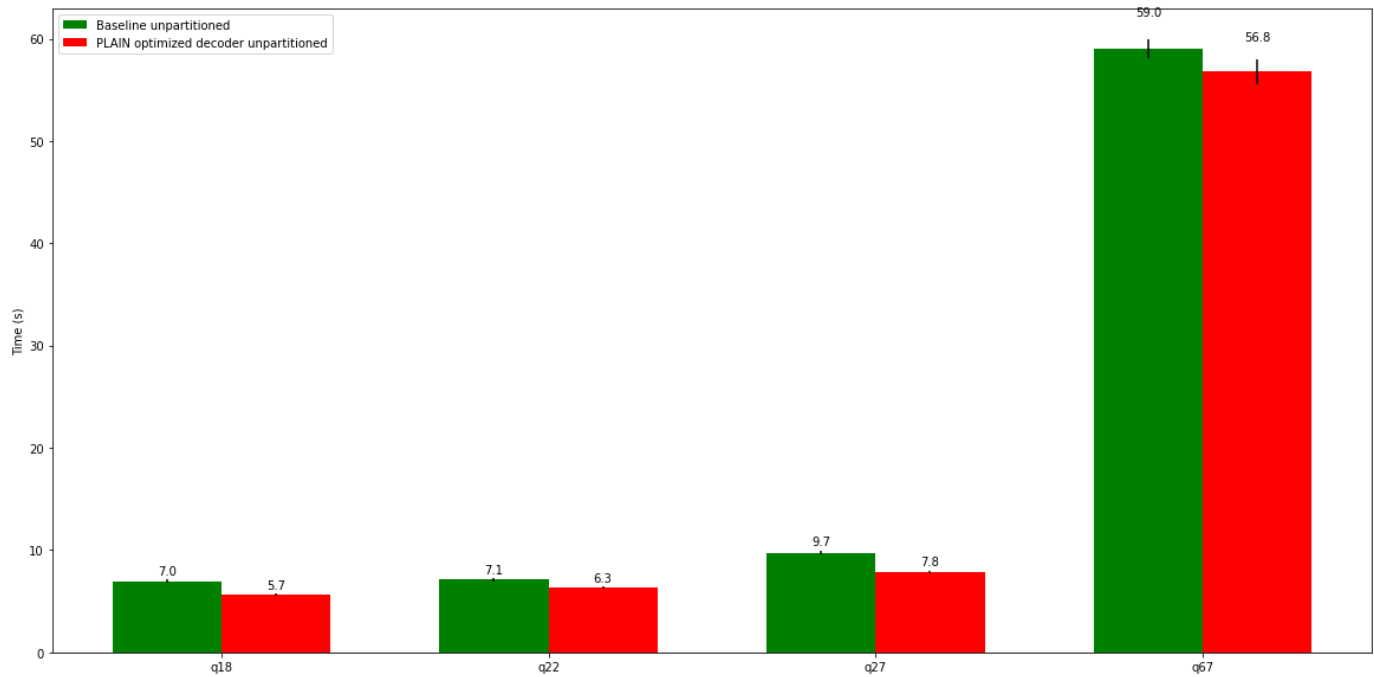
query	Baseline unpartitioned mean	Baseline unpartitioned std.dev	PLAIN optimized decoder unpartitioned mean	PLAIN optimized decoder unpartitioned std.dev
0 presto/tpch: q01	26.139667	0.594217	20.466333	0.442163
1 presto/tpch: q02	12.509500	2.046334	10.810333	0.174373
2 presto/tpch: q03	33.893333	0.742353	33.399667	0.696608
3 presto/tpch: q04	13.034167	0.232304	12.215167	0.153535
4 presto/tpch: q05	35.785833	1.520190	31.313167	1.659280
5 presto/tpch: q06	12.954000	0.812067	9.575333	0.346468
6 presto/tpch: q07	25.244333	0.734641	23.397333	0.422866
7 presto/tpch: q08	25.744333	1.052520	23.929167	0.457833
8 presto/tpch: q09	96.894833	1.608710	97.642667	3.451800
9 presto/tpch: q10	29.992000	0.671927	29.230667	3.093167
10 presto/tpch: q11	7.701667	0.201852	7.053000	0.186716
11 presto/tpch: q12	16.399500	0.880873	15.761500	0.788355
12 presto/tpch: q13	23.789667	0.270133	21.221833	0.222003
13 presto/tpch: q14	15.757833	0.825277	17.934000	3.705961
14 presto/tpch: q15	28.706833	0.435749	25.054333	1.324965
15 presto/tpch: q16	7.978667	0.175320	7.663500	0.199675

	query	Baseline unpartitioned mean	Baseline unpartitioned std.dev	PLAIN optimized decoder unpartitioned mean	PLAIN optimized decoder unpartitioned std.dev
16	presto/tpch: q17	52.865167	1.459408	49.052333	0.933874
17	presto/tpch: q18	56.256833	1.681714	52.036333	1.271274
18	presto/tpch: q19	22.410167	0.538843	18.209667	0.884617
19	presto/tpch: q20	25.526167	0.548564	23.696167	1.352191
20	presto/tpch: q21	77.469833	1.717992	74.361167	2.269428
21	presto/tpch: q22	6.620000	0.431376	6.149500	0.423150

TPC-DS Comparison (DURATION)







query	Baseline unpartitioned mean	Baseline unpartitioned std.dev	PLAIN optimized decoder unpartitioned mean	PLAIN optimized decoder unpartitioned std.dev
0 presto/tpcds: q01	3.218333	0.117244	3.023500	0.240402
1 presto/tpcds: q02	14.274667	0.273430	13.116333	0.244353
2 presto/tpcds: q03	4.803500	0.108544	5.424000	1.879868
3 presto/tpcds: q04	60.375333	0.572267	46.863833	0.163755
4 presto/tpcds: q05	27.462333	0.526192	25.320000	0.143356
5 presto/tpcds: q06	4.724000	0.197240	4.486667	0.166067
6 presto/tpcds: q07	10.537000	0.735774	8.228500	0.164639
7 presto/tpcds: q08	5.669667	0.166066	5.132333	0.175898
8 presto/tpcds: q09	21.796167	0.350717	17.706333	0.403204
9 presto/tpcds: q10	4.388667	0.124672	4.578333	0.184611
10 presto/tpcds: q11	33.256000	0.262634	27.717500	0.192854
11 presto/tpcds: q12	1.983833	0.049362	1.774000	0.105227
12 presto/tpcds: q13	17.028167	0.357837	13.459500	0.258082
13 presto/tpcds: q14	81.110833	0.393892	74.638833	0.421038
14 presto/tpcds: q15	2.605500	0.129166	2.280833	0.102944
15 presto/tpcds: q16	6.659833	0.315507	6.037500	0.199055

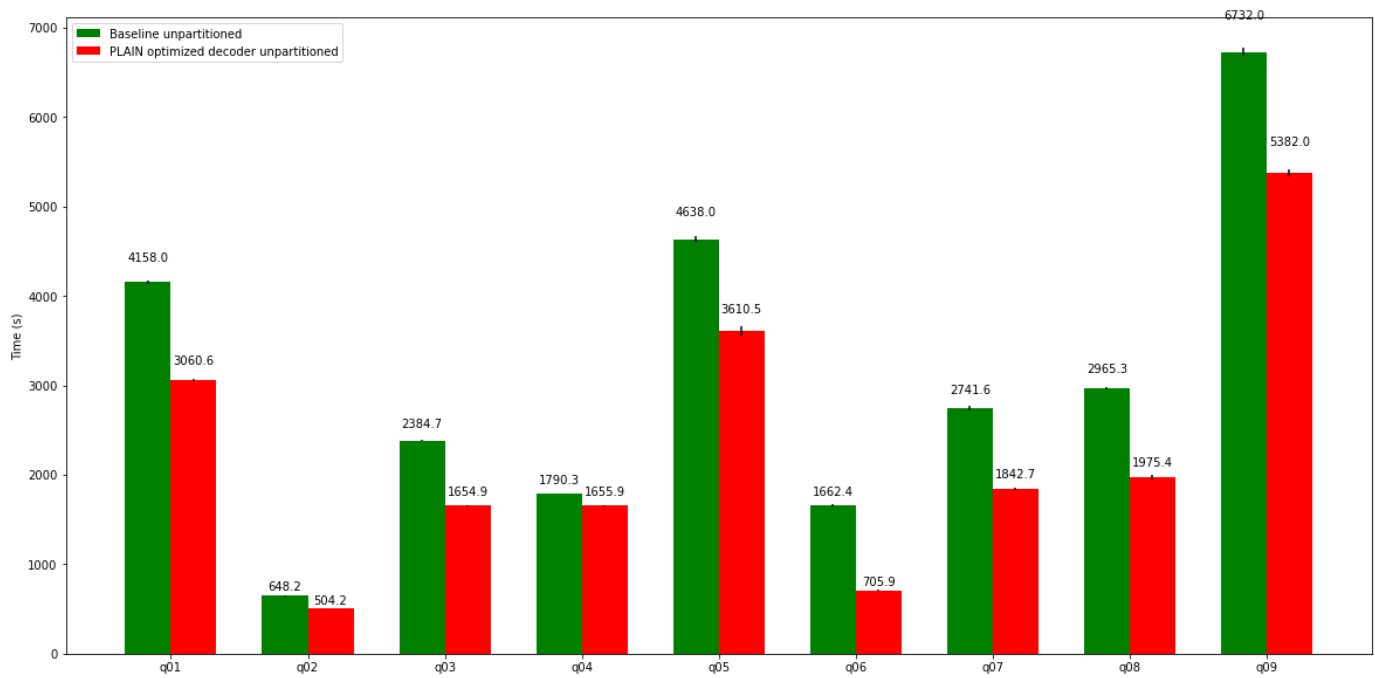
	query	Baseline unpartitioned mean	Baseline unpartitioned std.dev	PLAIN optimized decoder unpartitioned mean	PLAIN optimized decoder unpartitioned std.dev
16	presto/tpcds:q17	10.589667	0.405717	10.476500	0.352412
17	presto/tpcds:q18	6.977167	0.221133	5.680500	0.116891
18	presto/tpcds:q19	6.449167	0.176885	5.747500	0.109652
19	presto/tpcds:q20	2.130667	0.166725	1.942500	0.087940
20	presto/tpcds:q21	3.733500	0.054928	3.789167	0.110848
21	presto/tpcds:q22	7.103833	0.171326	6.320167	0.135081
22	presto/tpcds:q23	98.971500	0.549230	93.296500	1.003989
23	presto/tpcds:q24	24.695167	0.446718	22.198667	0.257115
24	presto/tpcds:q25	11.252833	0.231017	10.134833	0.187193
25	presto/tpcds:q26	5.546000	0.088706	4.608333	0.118702
26	presto/tpcds:q27	9.737000	0.192363	7.842667	0.132514
27	presto/tpcds:q28	29.530500	0.303027	22.741167	1.191810
28	presto/tpcds:q29	10.455000	0.197891	10.155000	1.835450
29	presto/tpcds:q30	1.874333	0.196173	1.594167	0.040740
30	presto/tpcds:q31	15.668833	0.205922	13.389500	0.195461
31	presto/tpcds:q32	4.459833	0.170058	4.098833	0.200105
32	presto/tpcds:q33	7.572500	0.130661	6.918667	0.060725
33	presto/tpcds:q34	4.241667	0.058126	4.054333	0.032727
34	presto/tpcds:q35	5.374333	0.155452	10.233833	7.103791
35	presto/tpcds:q36	7.333833	0.130784	6.307667	0.167859
36	presto/tpcds:q37	5.172167	0.751042	11.698500	3.764076
37	presto/tpcds:q38	10.576667	0.068117	9.809167	0.040632
38	presto/tpcds:q39	4.296500	0.130402	3.800833	0.171612
39	presto/tpcds:q40	10.229333	0.223667	10.021667	0.201410
40	presto/tpcds:q41	0.422167	0.015184	0.422000	0.047829

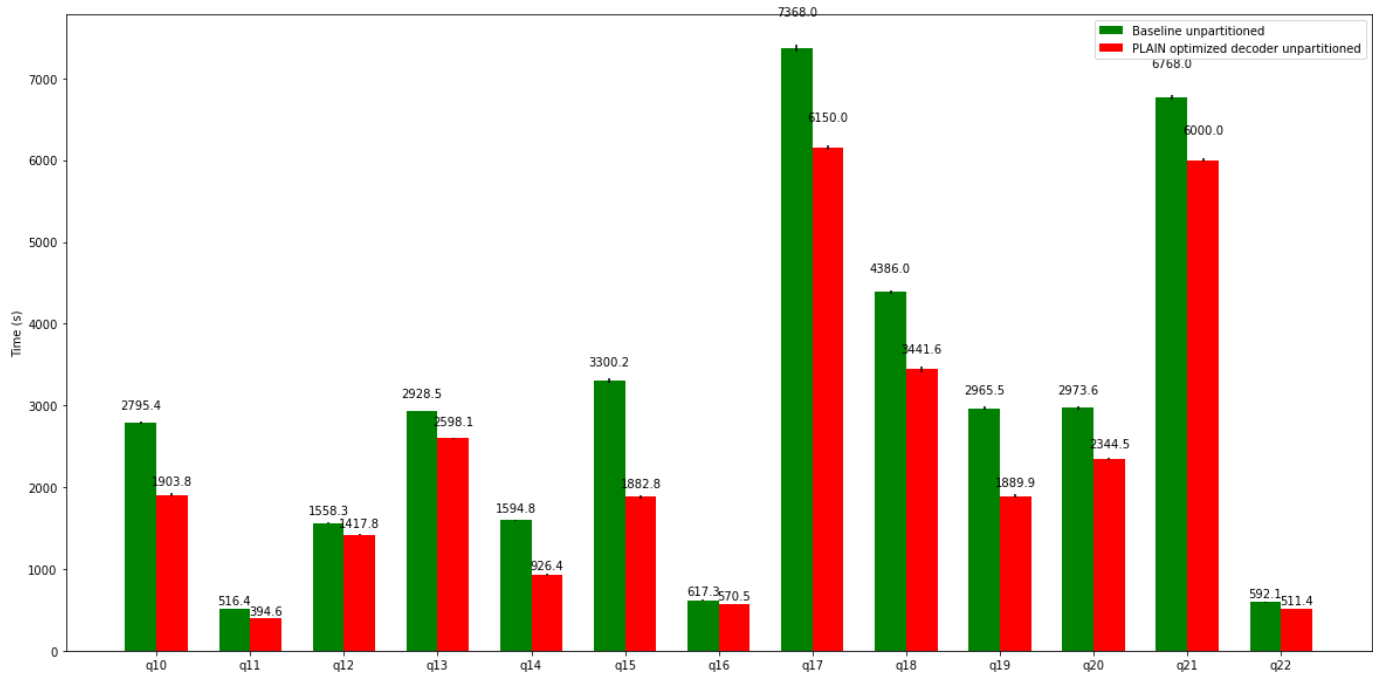
	query	Baseline unpartitioned mean	Baseline unpartitioned std.dev	PLAIN optimized decoder unpartitioned mean	PLAIN optimized decoder unpartitioned std.dev
41	presto/tpcds:q42	5.229500	0.299700	4.869500	0.284341
42	presto/tpcds:q43	5.068167	0.107572	4.451000	0.088505
43	presto/tpcds:q44	11.721833	0.610758	13.811833	3.598279
44	presto/tpcds:q45	2.607833	0.155198	2.255000	0.088618
45	presto/tpcds:q46	7.518333	0.073080	5.981333	0.260154
46	presto/tpcds:q47	46.712167	0.320807	43.187500	0.349955
47	presto/tpcds:q48	13.040500	0.151232	11.207000	0.200445
48	presto/tpcds:q49	12.969333	0.307291	11.680833	0.307467
49	presto/tpcds:q50	23.418000	0.522285	23.420667	0.975468
50	presto/tpcds:q51	15.099500	0.352142	13.688667	0.705604
51	presto/tpcds:q52	5.374833	0.105437	4.538833	0.198784
52	presto/tpcds:q53	5.986500	0.201630	5.187667	0.169907
53	presto/tpcds:q54	12.976167	0.257871	12.082833	0.335745
54	presto/tpcds:q55	5.166333	0.241575	4.376500	0.129149
55	presto/tpcds:q56	7.673500	0.155384	7.042333	0.148383
56	presto/tpcds:q57	22.241000	0.153464	19.900333	0.193413
57	presto/tpcds:q58	7.527000	0.286871	6.935167	0.136974
58	presto/tpcds:q59	23.648333	0.189201	21.106000	0.210113
59	presto/tpcds:q60	8.448833	0.240721	7.512000	0.233737
60	presto/tpcds:q61	11.927167	0.196893	10.721333	0.360140
61	presto/tpcds:q62	3.491333	0.134135	3.479833	0.143841
62	presto/tpcds:q63	5.769833	0.092808	5.210333	0.105019
63	presto/tpcds:q64	78.330333	0.455859	70.576667	0.597825
64	presto/tpcds:q65	20.348833	0.228555	18.621667	0.121996
65	presto/tpcds:q66	6.274833	0.121600	5.253500	0.116201

	query	Baseline unpartitioned mean	Baseline unpartitioned std.dev	PLAIN optimized decoder unpartitioned mean	PLAIN optimized decoder unpartitioned std.dev
66	presto/tpcds:q67	59.036833	0.914173	56.793000	1.225380
67	presto/tpcds:q68	9.911667	0.221848	7.605500	0.185493
68	presto/tpcds:q69	4.620000	0.250755	4.590833	0.174207
69	presto/tpcds:q70	13.624667	0.643338	12.892167	0.449219
70	presto/tpcds:q71	10.707500	0.220991	9.009000	0.129021
71	presto/tpcds:q72	12.942333	0.487869	14.302667	1.609813
72	presto/tpcds:q73	4.006500	0.100530	3.929500	0.139625
73	presto/tpcds:q74	20.594500	0.134702	17.871000	0.177351
74	presto/tpcds:q75	32.726333	0.456690	28.896667	0.488865
75	presto/tpcds:q76	7.563833	0.166471	7.303667	0.147060
76	presto/tpcds:q77	9.038167	0.099815	7.392500	0.119519
77	presto/tpcds:q78	72.010167	1.018631	68.707667	0.696588
78	presto/tpcds:q79	8.158000	0.477130	6.459167	0.139172
79	presto/tpcds:q80	57.289667	1.845060	54.607333	0.846267
80	presto/tpcds:q81	2.542000	0.058062	2.413000	0.098612
81	presto/tpcds:q82	5.945167	0.185149	5.573833	0.139246
82	presto/tpcds:q83	1.796000	0.085963	1.714333	0.050654
83	presto/tpcds:q84	1.341167	0.114739	1.258500	0.125291
84	presto/tpcds:q85	8.357333	0.372365	7.806500	0.833388
85	presto/tpcds:q86	3.545167	0.188804	3.088167	0.200772
86	presto/tpcds:q87	10.762833	0.174518	10.240667	0.141842
87	presto/tpcds:q88	19.900333	0.390987	20.017167	0.220067
88	presto/tpcds:q89	6.512000	0.211834	5.705667	0.254269
89	presto/tpcds:q90	1.952667	0.218308	2.517000	0.786640
90	presto/tpcds:q91	1.160167	0.064378	1.155167	0.143849

	query	Baseline unpartitioned mean	Baseline unpartitioned std.dev	PLAIN optimized decoder unpartitioned mean	PLAIN optimized decoder unpartitioned std.dev
91	presto/tpcds: q92	3.067000	0.192465	2.739500	0.101022
92	presto/tpcds: q93	28.075833	0.496962	26.828667	0.712449
93	presto/tpcds: q94	3.973000	0.176060	3.522167	0.227072
94	presto/tpcds: q95	13.917667	0.428700	13.059167	0.606303
95	presto/tpcds: q96	3.220667	0.310633	3.261167	0.292078
96	presto/tpcds: q97	20.526000	0.237212	19.424000	0.207996
97	presto/tpcds: q98	6.015333	0.169792	5.360500	0.097326
98	presto/tpcds: q99	5.508833	0.085516	5.311000	0.108030

TPC-H Comparison (CPU)

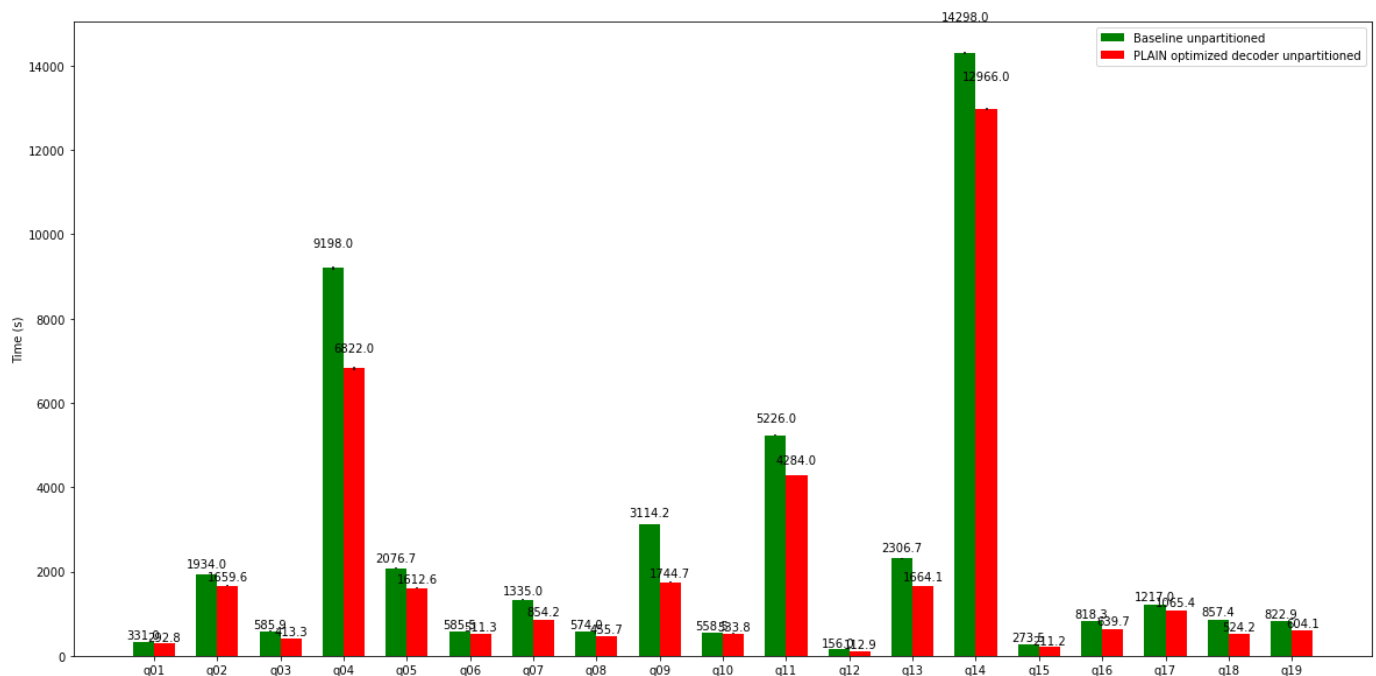
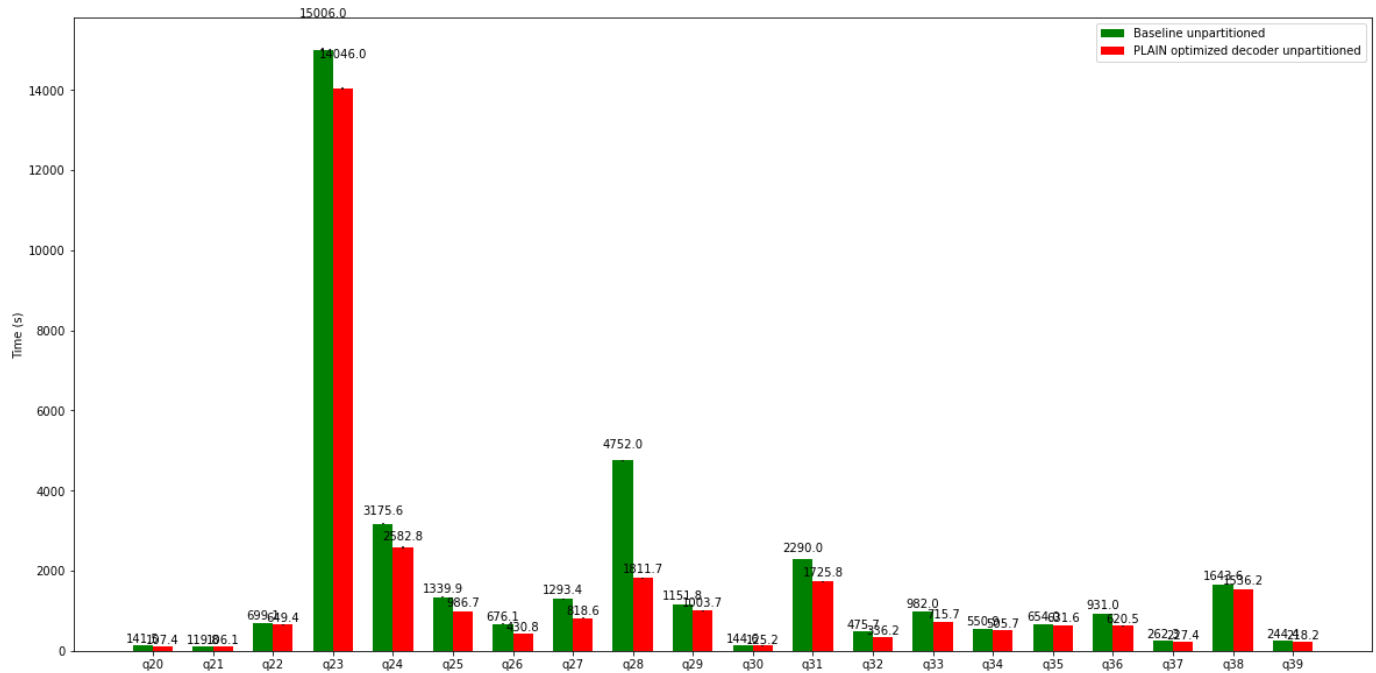


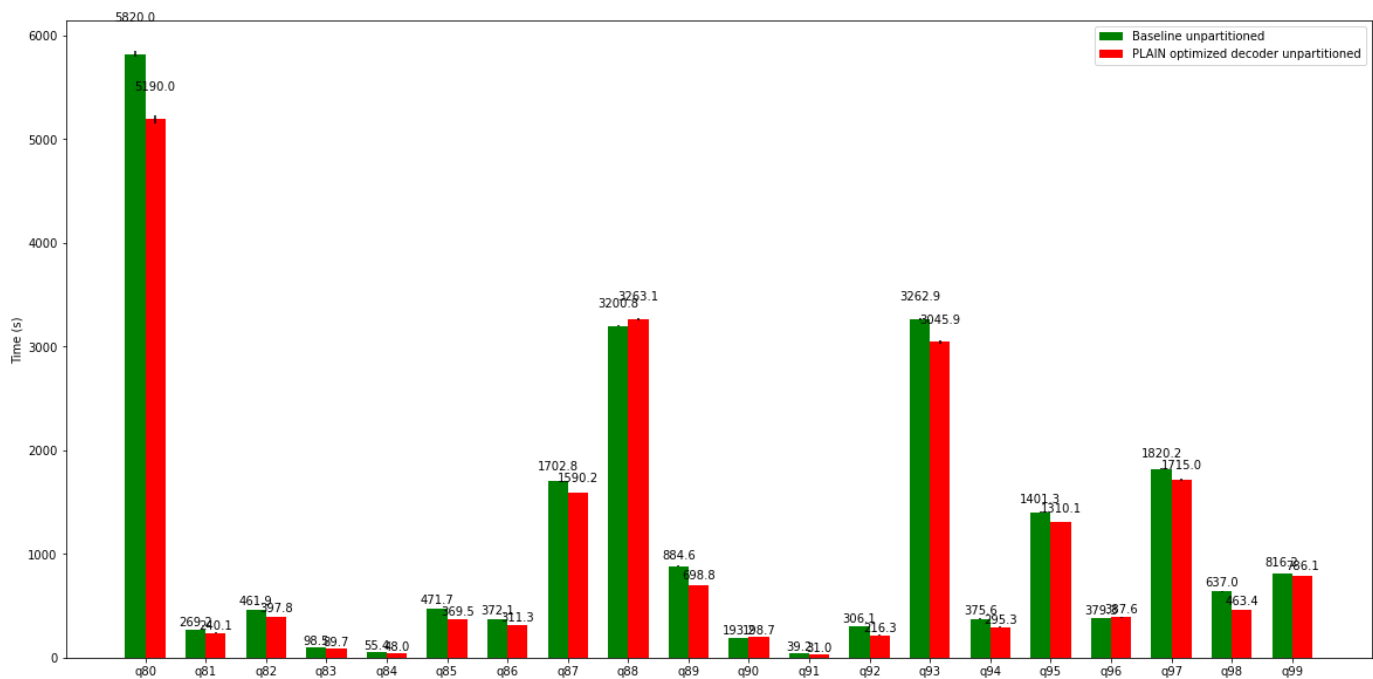
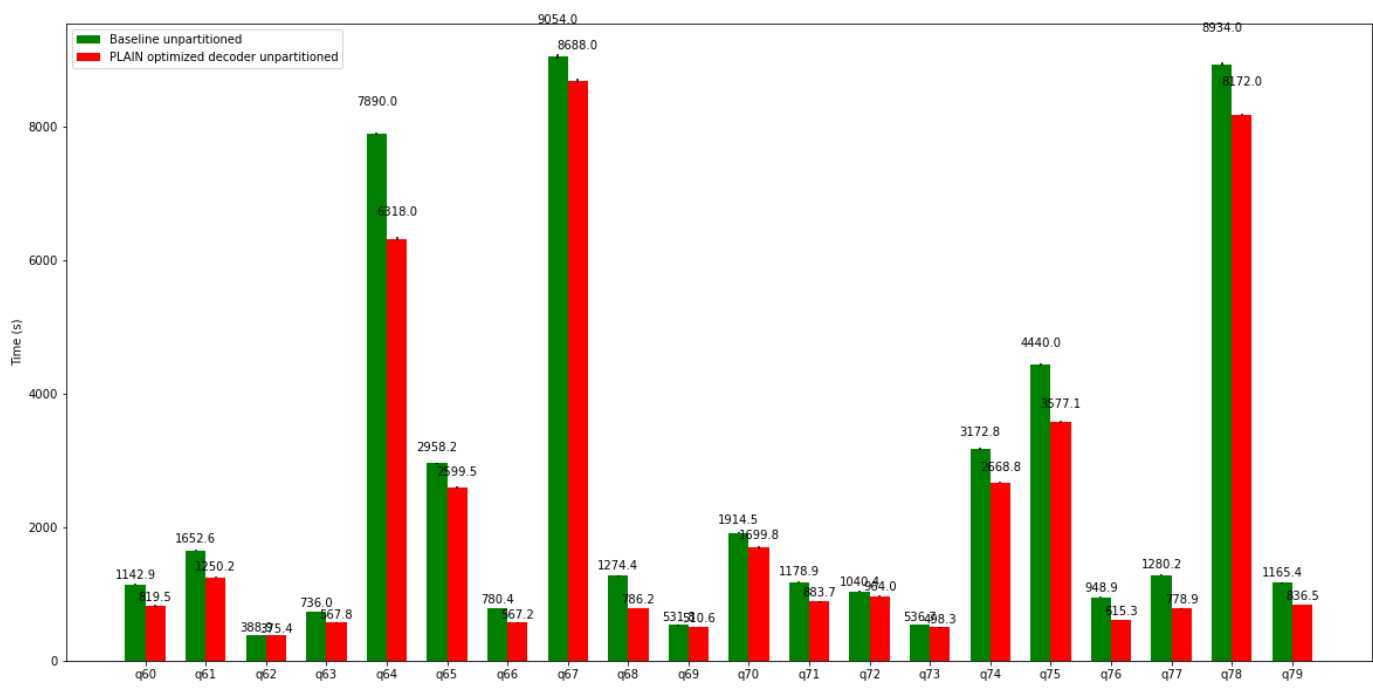
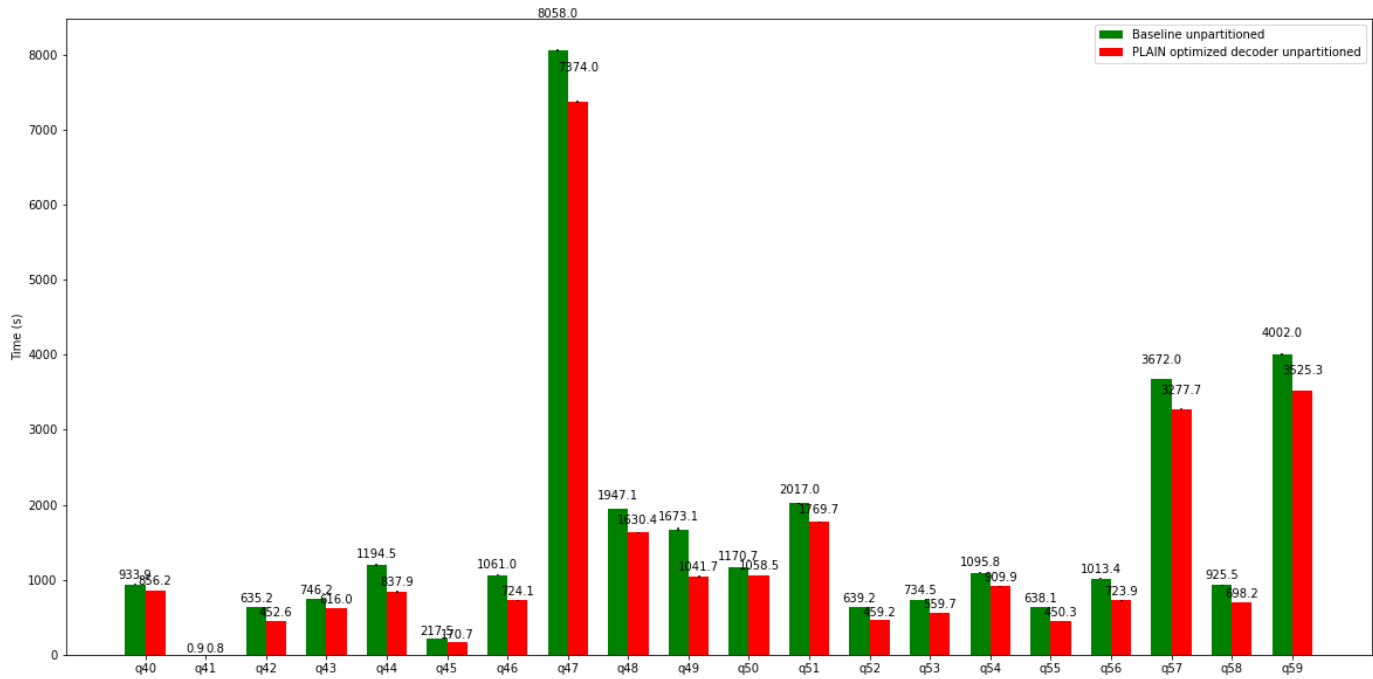


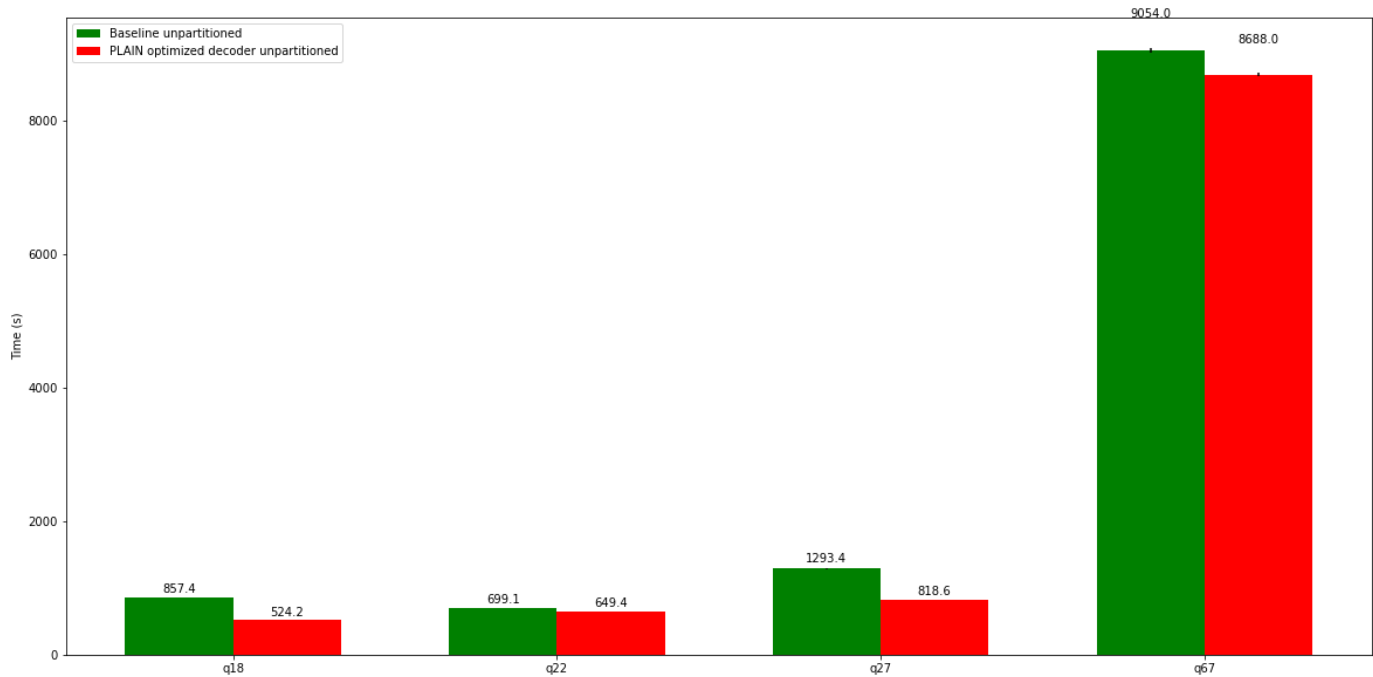
query	Baseline unpartitioned mean	Baseline unpartitioned std.dev	PLAIN optimized decoder unpartitioned mean	PLAIN optimized decoder unpartitioned std.dev
0 presto/tpch: q01	4158.0	19.718012	3060.6	13.335666
1 presto/tpch: q02	648.2	3.075061	504.2	2.328948
2 presto/tpch: q03	2384.7	5.416641	1654.9	10.443563
3 presto/tpch: q04	1790.3	5.504544	1655.9	9.474809
4 presto/tpch: q05	4638.0	27.099815	3610.5	47.081844
5 presto/tpch: q06	1662.4	10.995999	705.9	5.764373
6 presto/tpch: q07	2741.6	27.355438	1842.7	18.025648
7 presto/tpch: q08	2965.3	13.841243	1975.4	22.710350
8 presto/tpch: q09	6732.0	45.536798	5382.0	37.757119
9 presto/tpch: q10	2795.4	13.927239	1903.8	19.917831
10 presto/tpch: q11	516.4	1.402854	394.6	1.922498
11 presto/tpch: q12	1558.3	6.609992	1417.8	5.679437
12 presto/tpch: q13	2928.5	2.773446	2598.1	3.161645
13 presto/tpch: q14	1594.8	7.416738	926.4	9.562426
14 presto/tpch: q15	3300.2	27.205000	1882.8	23.222403
15 presto/tpch: q16	617.3	3.402940	570.5	4.023431

	query	Baseline unpartitioned mean	Baseline unpartitioned std.dev	PLAIN optimized decoder unpartitioned mean	PLAIN optimized decoder unpartitioned std.dev
16	presto/tpch: q17	7368.0	43.598165	6150.0	27.099815
17	presto/tpch: q18	4386.0	27.099815	3441.6	30.471495
18	presto/tpch: q19	2965.5	19.426477	1889.9	20.013096
19	presto/tpch: q20	2973.6	21.486368	2344.5	12.675488
20	presto/tpch: q21	6768.0	32.199379	6000.0	18.590320
21	presto/tpch: q22	592.1	3.338862	511.4	2.779928

TPC-DS Comparison (CPU)







query	Baseline unpartitioned mean	Baseline unpartitioned std.dev	PLAIN optimized decoder unpartitioned mean	PLAIN optimized decoder unpartitioned std.dev
0 presto/tpcds: q01	331.000000	1.239355	292.800000	0.536656
1 presto/tpcds: q02	1934.000000	4.253939	1659.600000	13.891004
2 presto/tpcds: q03	585.900000	4.204284	413.300000	2.022869
3 presto/tpcds: q04	9198.000000	44.090815	6822.000000	37.757119
4 presto/tpcds: q05	2076.700000	11.518854	1612.600000	15.106025
5 presto/tpcds: q06	585.500000	1.836301	511.300000	3.859015
6 presto/tpcds: q07	1335.000000	9.539811	854.200000	3.672601
7 presto/tpcds: q08	574.000000	2.266274	455.700000	2.362202
8 presto/tpcds: q09	3114.200000	5.572791	1744.700000	10.374392
9 presto/tpcds: q10	558.500000	2.193627	533.800000	0.979796
10 presto/tpcds: q11	5226.000000	14.696938	4284.000000	0.000000
11 presto/tpcds: q12	156.000000	0.758947	112.900000	0.701427
12 presto/tpcds: q13	2306.700000	5.389991	1664.100000	2.034699
13 presto/tpcds: q14	14298.000000	27.099815	12966.000000	27.099815
14 presto/tpcds: q15	273.500000	1.164474	211.200000	1.138420
15 presto/tpcds: q16	818.300000	5.097058	639.700000	2.824889

	query	Baseline unpartitioned mean	Baseline unpartitioned std.dev	PLAIN optimized decoder unpartitioned mean	PLAIN optimized decoder unpartitioned std.dev
16	presto/tpcds: q17	1217.000000	4.884260	1065.400000	5.043808
17	presto/tpcds: q18	857.400000	2.078461	524.200000	3.121538
18	presto/tpcds: q19	822.900000	5.059249	604.100000	5.722587
19	presto/tpcds: q20	141.500000	0.701427	107.400000	0.657267
20	presto/tpcds: q21	119.800000	2.201817	106.100000	0.883176
21	presto/tpcds: q22	699.100000	2.352020	649.400000	1.402854
22	presto/tpcds: q23	15006.000000	47.849765	14046.000000	27.099815
23	presto/tpcds: q24	3175.600000	15.607690	2582.800000	23.501830
24	presto/tpcds: q25	1339.900000	10.842693	986.700000	6.162792
25	presto/tpcds: q26	676.100000	4.232730	430.800000	2.709982
26	presto/tpcds: q27	1293.400000	9.827309	818.600000	4.452415
27	presto/tpcds: q28	4752.000000	22.768399	1811.700000	16.496181
28	presto/tpcds: q29	1151.800000	6.900435	1003.700000	8.747800
29	presto/tpcds: q30	144.600000	3.679130	125.200000	2.619924
30	presto/tpcds: q31	2290.000000	5.874691	1725.800000	8.929054
31	presto/tpcds: q32	475.700000	1.033441	336.200000	1.402854
32	presto/tpcds: q33	982.000000	2.753906	715.700000	3.745397
33	presto/tpcds: q34	550.900000	1.389964	505.700000	1.164474
34	presto/tpcds: q35	654.000000	3.308172	631.600000	3.212476
35	presto/tpcds: q36	931.000000	6.424951	620.500000	2.721029
36	presto/tpcds: q37	262.300000	1.489966	227.400000	0.657267
37	presto/tpcds: q38	1643.600000	1.806654	1536.200000	2.979933
38	presto/tpcds: q39	244.400000	0.489898	218.200000	0.619677
39	presto/tpcds: q40	933.900000	6.514906	856.200000	4.947727
40	presto/tpcds: q41	0.878167	0.007627	0.815667	0.019603

	query	Baseline unpartitioned mean	Baseline unpartitioned std.dev	PLAIN optimized decoder unpartitioned mean	PLAIN optimized decoder unpartitioned std.dev
41	presto/tpcds:q42	635.200000	2.955673	452.600000	1.117139
42	presto/tpcds:q43	746.200000	1.402854	616.000000	1.884675
43	presto/tpcds:q44	1194.500000	18.918245	837.900000	12.822324
44	presto/tpcds:q45	217.500000	1.244186	170.700000	0.827043
45	presto/tpcds:q46	1061.000000	4.468557	724.100000	3.161645
46	presto/tpcds:q47	8058.000000	14.696938	7374.000000	14.696938
47	presto/tpcds:q48	1947.100000	4.669475	1630.400000	5.935655
48	presto/tpcds:q49	1673.100000	18.445487	1041.700000	7.963667
49	presto/tpcds:q50	1170.700000	2.382436	1058.500000	0.797496
50	presto/tpcds:q51	2017.000000	6.774068	1769.700000	10.844907
51	presto/tpcds:q52	639.200000	4.133763	459.200000	1.117139
52	presto/tpcds:q53	734.500000	2.925064	559.700000	2.721029
53	presto/tpcds:q54	1095.800000	4.009988	909.900000	2.509980
54	presto/tpcds:q55	638.100000	5.282045	450.300000	2.362202
55	presto/tpcds:q56	1013.400000	5.203076	723.900000	2.756084
56	presto/tpcds:q57	3672.000000	0.000000	3277.700000	6.320443
57	presto/tpcds:q58	925.500000	4.135215	698.200000	2.931211
58	presto/tpcds:q59	4002.000000	14.696938	3525.300000	2.933258
59	presto/tpcds:q60	1142.900000	8.454821	819.500000	11.936331
60	presto/tpcds:q61	1652.600000	3.672601	1250.200000	10.059026
61	presto/tpcds:q62	388.900000	0.797496	375.400000	1.402854
62	presto/tpcds:q63	736.000000	1.884675	567.800000	3.121538
63	presto/tpcds:q64	7890.000000	14.696938	6318.000000	30.119761
64	presto/tpcds:q65	2958.200000	5.725731	2599.500000	15.700064
65	presto/tpcds:q66	780.400000	2.419917	567.200000	4.548406

	query	Baseline unpartitioned mean	Baseline unpartitioned std.dev	PLAIN optimized decoder unpartitioned mean	PLAIN optimized decoder unpartitioned std.dev
66	presto/tpcds:q67	9054.000000	30.119761	8688.000000	29.393877
67	presto/tpcds:q68	1274.400000	8.744370	786.200000	4.657897
68	presto/tpcds:q69	531.800000	0.979796	510.600000	0.848528
69	presto/tpcds:q70	1914.500000	12.764169	1699.800000	21.947209
70	presto/tpcds:q71	1178.900000	3.859015	883.700000	3.726124
71	presto/tpcds:q72	1040.400000	10.468238	964.000000	10.208232
72	presto/tpcds:q73	536.700000	1.457395	498.300000	2.422396
73	presto/tpcds:q74	3172.800000	12.412897	2668.800000	8.834478
74	presto/tpcds:q75	4440.000000	18.590320	3577.100000	13.174976
75	presto/tpcds:q76	948.900000	7.066258	615.300000	2.451938
76	presto/tpcds:q77	1280.200000	7.490794	778.900000	2.824889
77	presto/tpcds:q78	8934.000000	27.099815	8172.000000	22.768399
78	presto/tpcds:q79	1165.400000	4.387254	836.500000	4.700213
79	presto/tpcds:q80	5820.000000	29.393877	5190.000000	35.394915
80	presto/tpcds:q81	269.200000	3.279024	240.100000	3.969383
81	presto/tpcds:q82	461.900000	1.913113	397.800000	0.848528
82	presto/tpcds:q83	98.500000	0.244949	89.700000	0.328634
83	presto/tpcds:q84	55.373333	0.238467	48.050000	0.276912
84	presto/tpcds:q85	471.700000	2.382436	369.500000	3.568193
85	presto/tpcds:q86	372.100000	1.796664	311.300000	1.164474
86	presto/tpcds:q87	1702.800000	1.697056	1590.200000	1.639512
87	presto/tpcds:q88	3200.800000	5.935655	3263.100000	5.851154
88	presto/tpcds:q89	884.600000	3.344249	698.800000	2.066882
89	presto/tpcds:q90	193.200000	1.314534	198.700000	2.193627
90	presto/tpcds:q91	39.200000	0.707672	30.986667	0.663224

	query	Baseline unpartitioned mean	Baseline unpartitioned std.dev	PLAIN optimized decoder unpartitioned mean	PLAIN optimized decoder unpartitioned std.dev
91	presto/tpcds: q92	306.100000	1.100909	216.300000	1.769746
92	presto/tpcds: q93	3262.900000	7.430478	3045.900000	14.885563
93	presto/tpcds: q94	375.600000	2.987976	295.300000	4.041287
94	presto/tpcds: q95	1401.300000	7.558571	1310.100000	2.451938
95	presto/tpcds: q96	379.300000	0.701427	387.600000	1.073313
96	presto/tpcds: q97	1820.200000	6.254598	1715.000000	8.465459
97	presto/tpcds: q98	637.000000	2.328948	463.400000	2.297825
98	presto/tpcds: q99	816.200000	0.619677	786.100000	0.883176

TPC-H Comparison (Peak memory)

TPC-DS Comparison (Peak memory)

TPC-H Comparison (physicalInputDataSize)

TPC-DS Comparison (physicalInputDataSize)