Distribution of Parameters for Generated SQL Queries on the TPC-H Database

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## Scenario: 1-6jp_ujjp__g_hOss_hOnss

## Scale factor: 5 GB

## The 1000-query pack was generated on: 2023-11-10

## First column ('Query parameter or value') displays either:

## - a parameter name, or

## - a value of the current parameter (only for low-cardinality parameters).

## Second column ('Descriptive statistics') displays:

## - for low cardinality parameters: frequency and proportion from total (of 1000 queries)

## - for higher cardinality parameters: [min, median, max] mean / SD
```

Query parameter or value	Descriptive statistics	
SELECT_n_of_columns	[1, 9, 165] 15 / 22	
SELECT_n_of_non_aggr_funcDOW		
0	853 (85%)	
1	106 (11%)	
2	$26\ (2.6\%)$	
3	5~(0.5%)	
4	5~(0.5%)	
5	2~(0.2%)	
6	1 (0.1%)	
7	2(0.2%)	
SELECT_n_of_non_aggr_funcLOWER		
0	623~(62%)	
1	260 (26%)	
2	66 (6.6%)	
3	30 (3.0%)	

Query parameter or value	Descriptive statistics
4	7 (0.7%)
5	6~(0.6%)
6	6 (0.6%)
7	2~(0.2%)
SELECT_n_of_non_aggr_funcLTRIM	[0.00, 0.00, 9.00] 0.58 / 1.01
SELECT_n_of_non_aggr_funcMONTH	
0	808 (81%)
1	$140 \ (14\%)$
2	$31 \ (3.1\%)$
3	$13\ (1.3\%)$
4	3~(0.3%)
5	2(0.2%)
6	1 (0.1%)
7	1 (0.1%)
8 CPL POT	1~(0.1%)
SELECT_n_of_non_aggr_funcABS	042 (0004)
0	915 (92%)
1	73 (7.3%)
2	8 (0.8%)
3	3 (0.3%)
GELECT n of non-agen func. LOC	1 (0.1%)
SELECT_n_of_non_aggr_funcLOG 0	851 (85%)
1	113 (11%)
2	$\frac{113}{22} \frac{(11\%)}{(2.2\%)}$
3	8 (0.8%)
4	4 (0.4%)
7	1 (0.1%) $1 (0.1%)$
8	1 (0.1%)
SELECT_n_of_non_aggr_funcROUND	1 (0.170)
0	908 (91%)
1	73 (7.3%)
2	17 (1.7%)
3	1 (0.1%)
4	1(0.1%)
SELECT_n_of_non_aggr_funcRTRIM SELECT_n_of_non_aggr_funcUPPER	[0.00, 0.00, 11.00] $[0.63 / 1.05]$
0	615~(62%)
1	250~(25%)
10	$2\;(0.2\%)$
2	81 (8.1%)
3	$29\ (2.9\%)$
4	8 (0.8%)
5	7 (0.7%)
6	$3\ (0.3\%)$
7	5~(0.5%)

Query parameter or value	Descriptive statistics
SELECT_n_of_non_aggr_funcSQRT	
0	812 (81%)
1	135~(14%)
2	$30 \ (3.0\%)$
3	14 (1.4%)
4	4~(0.4%)
5	3~(0.3%)
6	2~(0.2%)
SELECT_n_of_non_aggr_funcSUBSTR	[0.00, 0.00, 11.00] 0.58 / 1.08
SELECT_n_of_non_aggr_funcYEAR	
0	822~(82%)
1	131 (13%)
2	32 (3.2%)
3	8~(0.8%)
4	$3\;(0.3\%)$
5	1~(0.1%)
6	2~(0.2%)
7	1~(0.1%)
SELECT_n_of_non_aggr_funcDAY	
0	865~(87%)
1	106 (11%)
2	$21\ (2.1\%)$
3	6~(0.6%)
4	1~(0.1%)
5	1~(0.1%)
SELECT_n_of_non_aggr_funcFLOOR	4
0	924 (92%)
1	63 (6.3%)
2	10 (1.0%)
	$3\;(0.3\%)$
SELECT_n_of_non_aggr_funcTRUNC	00= (000/)
0	927 (93%)
1	63 (6.3%)
2	7 (0.7%)
	3 (0.3%)
SELECT_n_of_all_non_aggr_func	$[0.0, 3.0, 70.0] \ 4.8 \ / \ 7.5$
SELECT_n_of_aggr_funcAVG	000 (000)
0	928 (93%)
1	52 (5.2%)
2 3	16 (1.6%)
	2(0.2%)
4 SELECT n of aggr func COUNT	$\begin{array}{c} 2 \; (0.2\%) \\ [0.00, 0.00, 12.00] \; 0.83 \; / \; 1.94 \end{array}$
66	[0.00, 0.00, 12.00] $[0.83 / 1.94]$ $[0.00, 0.00, 13.00]$ $[0.91 / 2.07]$
66	[0.00, 0.00, 13.00] $[0.91 / 2.07]$ $[0.00, 0.00, 11.00]$ $[0.83 / 1.89]$
SELECT_n_of_aggr_funcCOUNT_DISTINCT	[0.00, 0.00, 11.00] 0.92 / 1.94

Query parameter or value	Descriptive statistics
SELECT_n_of_aggr_funcSUM	
0	$931 \; (93\%)$
1	$46 \ (4.6\%)$
2	16 (1.6%)
3	5~(0.5%)
4	$2\;(0.2\%)$
SELECT_n_of_all_aggr_func	[0.0, 3.0, 13.0] 3.7 / 3.1
FROM_n_of_join_paths	
1	$156 \; (16\%)$
2	182~(18%)
3	169 (17%)
4	165 (17%)
5	157 (16%)
6	171 (17%)
FROM_n_of_super_joinsFULL	,
0	547 (55%)
1	311 (31%)
2	108 (11%)
3	$32\ (3.2\%)$
4	$2\;(0.2\%)^{'}$
FROM_n_of_super_joinsRIGHT	,
0	558~(56%)
1	310~(31%)
2	100 (10%)
3	29 (2.9%)
4	3~(0.3%)
FROM_n_of_super_joinsLEFT	
0	551 (55%)
1	300 (30%)
2	122 (12%)
3	$22\ (2.2\%)$
4	5 (0.5%)
FROM_n_of_joinsINNER	[0.00, 3.00, 12.00] 3.32 / 2.47
FROM_n_of_joinsRIGHT	[0.00, 3.00, 15.00] 3.16 / 2.44
FROM_n_of_processed_rows	[5, 46,500,033, 225,249,768] 56,495,202 / 44,842,961
WHERE_n_of_predicates	[0.00, 3.00, 13.00] 3.81 / 2.94
WHERE_n_of_attribs_of_typechar	
0	376 (38%)
1	263 (26%)
2	192 (19%)
~ 3	98 (9.8%)
4	50 (5.0%)
5	16 (3.6%)
6	5 (0.5%)
WHERE_n_of_attribs_of_typedate	,
0	793 (79%)
	100 (10/0)

Query parameter or value	Descriptive statistics
1	180 (18%)
2	$23\ (2.3\%)$
3	4(0.4%)
WHERE_n_of_attribs_of_typeinteger	, ,
0	361 (36%)
1	305 (31%)
2	181 (18%)
3	94 (9.4%)
4	43 (4.3%)
5	$10 \ (1.0\%)$
6	6~(0.6%)
$WHERE_n_of_attribs_of_type__numeric$	
0	564~(56%)
1	287 (29%)
2	101 (10%)
3	$36 \ (3.6\%)$
4	9~(0.9%)
5	3~(0.3%)
WHERE_n_of_attribs_of_typecharacter	
0	648~(65%)
1	261~(26%)
2	$73 \ (7.3\%)$
3	$16 \ (1.6\%)$
4	2~(0.2%)
WHERE_n_of_pkey_attribs	
0	549 (55%)
1	285 (29%)
2	127 (13%)
3	25 (2.5%)
4	14 (1.4%)
WHERE_n_of_connect_OR	$[0.00, 1.50, 12.00] \ 2.17 \ / \ 2.40$
WHERE_n_of_operatorsbetween	~~a (~a)~)
0	556 (56%)
1	267 (27%)
2	124 (12%)
3	37 (3.7%)
4	14 (1.4%)
5	1 (0.1%)
	1 (0.1%)
WHERE_n_of_operatorsgreater_or_less WHERE_n_of_operatorsin	[0.00, 1.00, 9.00] 1.42 / 1.46
0	538 (54%)
1	291 (29%)
2	$123\ (12\%)$
3	$38 \ (3.8\%)$
4	8 (0.8%)

Query parameter or value	Descriptive statistics
5	2 (0.2%)
$WHERE_n_of_operators__like$	
0	793~(79%)
1	177 (18%)
2	$23\ (2.3\%)$
3	6 (0.6%)
4	1~(0.1%)
WHERE_n_of_non_aggr_funcDOW	222 (2204)
0	963 (96%)
1	36 (3.6%)
2	1~(0.1%)
WHERE_n_of_non_aggr_funcLOG	024 (0204)
0	924 (92%)
1	72 (7.2%)
2 WHERE I GORT	4~(0.4%)
WHERE_n_of_non_aggr_funcSQRT	075 (0007)
0	875 (88%) 113 (11%)
1 2	113 (11%) 11 (1.1%)
3	11 (1.1%) $1 (0.1%)$
WHERE_n_of_non_aggr_funcABS	1 (0.170)
0	952 (95%)
1	47 (4.7%)
2	1 (0.1%)
WHERE_n_of_non_aggr_funcTRUNC	1 (0.170)
0	962 (96%)
1	37 (3.7%)
2	1 (0.1%)
WHERE_n_of_non_aggr_funcYEAR	(/
0	969~(97%)
1	31 (3.1%)
WHERE_n_of_non_aggr_funcROUND	, ,
0	965 (97%)
1	35~(3.5%)
WHERE_n_of_non_aggr_funcFLOOR	
0	959~(96%)
1	41 (4.1%)
WHERE_n_of_non_aggr_funcDAY	
0	$972 \ (97\%)$
1	$28 \ (2.8\%)$
WHERE_n_of_non_aggr_funcMONTH	4 . 24
0	970 (97%)
1	29 (2.9%)
2	1~(0.1%)
WHERE_n_of_all_non_aggr_func	(2004)
0	631 (63%)

Query parameter or value	Descriptive statistics
1	268 (27%)
2	69~(6.9%)
3	25~(2.5%)
4	6 (0.6%)
5	1 (0.1%)
GROUP_BY_n_of_columns	[0.00, 2.00, 12.00] 3.14 / 2.86
HAVING_n_of_main_predicates	
0	427 (43%)
1	196 (20%)
2	187 (19%)
3	190 (19%)
ORDER_BY_n_of_columns	
0	321 (32%)
1	322 (32%)
2	238 (24%)
3	85~(8.5%)
4	22~(2.2%)
5	$7\;(0.7\%)$
6	$3\;(0.3\%)$
γ	$2 \; (0.2\%)$
limit	[2, 521, 999] 503 / 287
offset	[0,0,996]239/321