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

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## Scenario: 1-3jp_ujjp__g_hOss_hOnss

## Scale factor: 1 GB

## The 1000-query pack was generated on: 2023-11-09

## 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, 7, 110] 10 / 13
SELECT_n_of_non_aggr_funcRTRIM	
0	702 (70%)
1	$222\ (22\%)$
2	59~(5.9%)
3	8 (0.8%)
4	6~(0.6%)
5	3~(0.3%)
SELECT_n_of_non_aggr_funcSUBSTR	
0	690 (69%)
1	227~(23%)
2	64 (6.4%)
3	$13\ (1.3\%)$
4	5 (0.5%)
5	1 (0.1%)

Query parameter or value	Descriptive statistics
SELECT_n_of_non_aggr_funcLTRIM	
0	700 (70%)
1	$236\ (24\%)$
2	51 (5.1%)
3	9~(0.9%)
4	3~(0.3%)
6	1~(0.1%)
SELECT_n_of_non_aggr_funcLOWER	
0	676~(68%)
1	$267 \; (27\%)$
2	$46 \ (4.6\%)$
3	6~(0.6%)
4	2 (0.2%)
5	$3\;(0.3\%)$
SELECT_n_of_non_aggr_funcUPPER	
0	709 (71%)
1	226 (23%)
2	51 (5.1%)
3	6 (0.6%)
4	5 (0.5%)
5 CDL DOTE C ADC	3~(0.3%)
SELECT_n_of_non_aggr_funcABS	0.49 (0.407)
0	942 (94%)
1	50 (5.0%)
2 3	7 (0.7%)
SELECT_n_of_non_aggr_funcDAY	1 (0.1%)
0	919 (92%)
1	70 (7.0%)
2	9 (0.9%)
3	2(0.2%)
SELECT_n_of_non_aggr_funcMONTH	2 (0.270)
0	868 (87%)
1	106 (11%)
2	18 (1.8%)
3	4 (0.4%)
4	2~(0.2%)
5	2~(0.2%)
SELECT_n_of_non_aggr_funcDOW	,
0	893 (89%)
1	84 (8.4%)
2	$12\ (1.2\%)$
3	10 (1.0%)
4	1 (0.1%)
SELECT_n_of_non_aggr_funcLOG	
0	897 (90%)

Query parameter or value	Descriptive statistics
1	82 (8.2%)
2	$15\ (1.5\%)$
3	4(0.4%)
4	1 (0.1%)
5	1 (0.1%)
SELECT_n_of_non_aggr_funcROUND	` ,
0	950 (95%)
1	48 (4.8%)
2	1 (0.1%)
3	1 (0.1%)
SELECT_n_of_non_aggr_funcYEAR	, ,
0	870 (87%)
1	96 (9.6%)
2	$23\ (2.3\%)$
3	8 (0.8%)
4	3~(0.3%)
SELECT_n_of_non_aggr_funcSQRT	, ,
	854 (85%)
1	119 (12%)
2	18 (1.8%)
3	8 (0.8%)
4	1 (0.1%)
SELECT_n_of_non_aggr_funcTRUNC	,
0	946 (95%)
1	48 (4.8%)
2	5~(0.5%)
3	1 (0.1%)
SELECT_n_of_non_aggr_funcFLOOR	
0	948~(95%)
1	$49 \ (4.9\%)$
2	3~(0.3%)
SELECT_n_of_all_non_aggr_func	$[0.00, 2.00, 35.00] \ 3.12 \ / \ 4.09$
SELECT_n_of_aggr_funcCOUNT	[0.00, 0.00, 9.00] 0.75 / 1.57
SELECT_n_of_aggr_funcMAX	[0.00, 0.00, 12.00] 0.62 / 1.47
SELECT_n_of_aggr_funcAVG	
0	948~(95%)
1	$42 \ (4.2\%)$
2	7 (0.7%)
3	3~(0.3%)
SELECT_n_of_aggr_funcMIN	[0.00, 0.00, 9.00] 0.65 / 1.40
SELECT_n_of_aggr_funcCOUNT_DISTINCT	$[0.00, 0.00, 9.00] \ 0.66 \ / \ 1.50$
SELECT_n_of_aggr_funcSUM	- ,
0	954~(95%)
1	$33\ (3.3\%)$
2	11 (1.1%)
3	$2\;(0.2\%)$

Query parameter or value	Descriptive statistics
SELECT_n_of_all_aggr_func	[0.00, 2.00, 12.00] 2.80 / 2.28
FROM_n_of_join_paths	, , ,
	314 (31%)
2	348 (35%)
3	338 (34%)
$FROM_n_of_super_joins__RIGHT$	
0	746~(75%)
1	232~(23%)
2	$22 \; (2.2\%)$
FROM_n_of_super_joinsFULL	
0	784 (78%)
1	197 (20%)
	19~(1.9%)
FROM_n_of_super_joinsLEFT	555 (5007)
0	777 (78%)
1	206 (21%)
2 FROM n of joins INNER	17 (1.7%)
FROM_n_of_joinsINNER 0	236 (24%)
1	250 (24%) 252 (25%)
2	239 (24%)
3	139 (14%)
4	76 (7.6%)
5	39 (3.9%)
6	$13\ (1.3\%)$
7	$5~(0.5\%)^{'}$
8	1 (0.1%)
FROM_n_of_joinsRIGHT	,
0	244 (24%)
1	263~(26%)
2	209~(21%)
3	147 (15%)
4	84 (8.4%)
5	$37 \ (3.7\%)$
6	15 (1.5%)
7 TDOM:	1 (0.1%)
FROM_n_of_processed_rows	[5, 6,810,616, 22,801,828] $6,507,027 / 5,815,867$
WHERE_n_of_predicates	$[0.00, 3.00, 10.00] \ 2.89 \ / \ 2.20$
WHERE_n_of_attribs_of_typecharacter_	
0	436 (44%) 309 (31%)
1 2	153 (15%)
3	80 (8.0%)
	17 (1.7%)
<i>4 5</i>	3(0.3%)
6	1 (0.1%)
	1 (0.1/0)

Query parameter or value	Descriptive statistics
$\overline{\gamma}$	1 (0.1%)
WHERE_n_of_attribs_of_typeinteger	
0	436 (44%)
1	$320 \ (32\%)$
2	174~(17%)
3	$53 \ (5.3\%)$
4	$14\ (1.4\%)$
5	1~(0.1%)
6	$2\;(0.2\%)$
WHERE_n_of_attribs_of_typecharacter	(
0	718 (72%)
1	218 (22%)
2	56 (5.6%)
3	6 (0.6%)
WHERE is of attributed times in supposition	$2 \; (0.2\%)$
WHERE_n_of_attribs_of_typenumeric	642 (6407)
0	643 (64%)
1 2	269 (27%)
3	67 (6.7%) 18 (1.8%)
	3(0.3%)
WHERE n_of_attribs_of_typedate	3(0.370)
0	829 (83%)
1	141 (14%)
2	23 (2.3%)
~ 3	6 (0.6%)
4	1 (0.1%)
WHERE_n_of_pkey_attribs	,
0	611 (61%)
1	291 (29%)
2	75 (7.5%)
3	$21\ (2.1\%)$
4	2~(0.2%)
WHERE_n_of_connect_OR	
θ	435 (44%)
1	181 (18%)
2	137 (14%)
3	104 (10%)
4	66 (6.6%)
5	49 (4.9%)
6	21 (2.1%)
7 WHEDE is of appropriate greater on less	7 (0.7%)
WHERE_n_of_operatorsgreater_or_less	200 (4007)
<i>0 1</i>	399 (40%) 310 (31%)
2	, ,
4	172 (17%)

Query parameter or value	Descriptive statistics
3	85 (8.5%)
4	$23\ (2.3\%)$
5	9 (0.9%)
6	2 (0.2%)
WHERE_n_of_operatorsin	
0	611 (61%)
1	285~(29%)
2	80 (8.0%)
3	$21\ (2.1\%)$
4	3~(0.3%)
WHERE_n_of_operatorslike	
θ	840 (84%)
1	143~(14%)
2	$16 \; (1.6\%)$
3	1 (0.1%)
WHERE_n_of_operatorsbetween	
0	598~(60%)
1	278~(28%)
2	$90 \; (9.0\%)$
3	28~(2.8%)
4	6~(0.6%)
WHERE_n_of_non_aggr_funcROUND	
θ	971 (97%)
1	29~(2.9%)
WHERE_n_of_non_aggr_funcSQRT	
0	909 (91%)
1	85 (8.5%)
2	5 (0.5%)
3	1~(0.1%)
WHERE_n_of_non_aggr_funcTRUNC	227 (2704)
0	965 (97%)
1	34 (3.4%)
2	1~(0.1%)
WHERE_n_of_non_aggr_funcMONTH	000 (0 - 04)
0	966 (97%)
1	34 (3.4%)
WHERE_n_of_non_aggr_funcFLOOR	025 (0004)
0	975 (98%)
1	25~(2.5%)
WHERE_n_of_non_aggr_funcYEAR	060 (0707)
0	969 (97%)
1	29 (2.9%)
WHIEDE n of non-agen func. LOC	2~(0.2%)
WHERE_n_of_non_aggr_funcLOG	020 (0407)
0	938 (94%)
1	59 (5.9%)

Query parameter or value	Descriptive statistics
2	3 (0.3%)
WHERE n_of_non_aggr_funcABS	,
0	974~(97%)
1	$26\ (2.6\%)$
WHERE_n_of_non_aggr_funcDAY	
0 = 0	977 (98%)
1	$22\ (2.2\%)$
2	1(0.1%)
WHERE_n_of_non_aggr_funcDOW	(
0	974 (97%)
1	26 (2.6%)
WHERE n of all non aggr func	- (- / %)
θ	704 (70%)
1	219 (22%)
2	58 (5.8%)
3	16 (1.6%)
4	2(0.2%)
5	1 (0.1%)
GROUP_BY_n_of_columns	[0.00, 2.00, 9.00] $[0.44 / 2.10]$
HAVING_n_of_main_predicates	[,,] /
θ	410 (41%)
1	$213\ (21\%)$
2	197 (20%)
3	180 (18%)
ORDER_BY_n_of_columns	(-, *)
	297 (30%)
1	357 (36%)
$\stackrel{-}{2}$	261 (26%)
3	68 (6.8%)
4	9 (0.9%)
5	6 (0.6%)
6	1 (0.1%)
8	1 (0.1%)
limit	[2, 507, 999] 502 / 288
offset	[0, 0, 1,000] 252 / 329
	[0, 0, 1,000] 202 / 020