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: 1 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
```

Descriptive statistics
[1, 9, 172] 17 / 25
789 (79%)
146 (15%)
$36 \ (3.6\%)$
11 (1.1%)
7 (0.7%)
7 (0.7%)
2~(0.2%)
1 (0.1%)
1~(0.1%)
$[0.00, 0.00, 9.00] \ 0.62 \ / \ 1.11$
846 (85%)
111 (11%)

Query parameter or value	Descriptive statistics
2	21 (2.1%)
3	10 (1.0%)
4	$4\ (0.4\%)^{'}$
5	4(0.4%)
\mathfrak{S}	1 (0.1%)
7	3~(0.3%)
SELECT_n_of_non_aggr_funcMONTH	- (, -,
))	785 (79%)
1	151 (15%)
2	32 (3.2%)
3	11 (1.1%)
4	7 (0.7%)
	3 (0.3%)
	2 (0.2%)
y Y	5 (0.5%)
3	4 (0.4%)
SELECT_n_of_non_aggr_funcLOWER	$[0.00, 0.00, 11.00] \ 0.67 \ / \ 1.12$
SELECT_n_of_non_aggr_funcLOG	[0.00, 0.00, 11.00] $[0.07 / 1.12]$
)	858 (86%)
	104 (10%)
	18 (1.8%)
	10 (1.0%)
	8 (0.8%)
	1 (0.1%)
	,
	1 (0.1%)
SELECT_n_of_non_aggr_funcLTRIM	E00 (6007)
	599 (60%)
	287 (29%)
? }	$65 (6.5\%) \\ 24 (2.4\%)$
	8 (0.8%)
	, ,
	7 (0.7%)
3	4 (0.4%)
Y	4 (0.4%)
	2~(0.2%)
SELECT_n_of_non_aggr_funcROUND	012 (0107)
	913 (91%)
	66 (6.6%)
	18 (1.8%)
	3 (0.3%)
SELECT_n_of_non_aggr_funcRTRIM	[0.00, 0.00, 9.00] 0.58 / 1.05
SELECT_n_of_non_aggr_funcUPPER	[0.00, 0.00, 11.00] 0.65 / 1.18
SELECT_n_of_non_aggr_funcABS	010 (0101)
9	913 (91%)
1	70 (7.0%)
2	15 (1.5%)

Query parameter or value	Descriptive statistics
3	2 (0.2%)
SELECT_n_of_non_aggr_funcFLOOR	
0	897 (90%)
1	91 (9.1%)
2	10 (1.0%)
3	$2\;(0.2\%)$
SELECT_n_of_non_aggr_funcYEAR	[0.00, 0.00, 9.00] 0.29 / 0.83
SELECT_n_of_non_aggr_funcTRUNC	
0	904 (90%)
1	$83 \ (8.3\%)$
2	11 (1.1%)
3	2 (0.2%)
SELECT_n_of_non_aggr_funcDAY	
0	878 (88%)
1	96 (9.6%)
2	11 (1.1%)
3	$10 \ (1.0\%)$
4	2 (0.2%)
5	2 (0.2%)
6	1~(0.1%)
SELECT_n_of_all_non_aggr_func	[0.0,3.0,79.0]5.2/8.5
SELECT_n_of_aggr_funcCOUNT	[0.00, 0.00, 12.00] 0.80 / 1.78
SELECT_n_of_aggr_funcMIN	[0.00, 0.00, 13.00] 0.78 / 1.87
SELECT_n_of_aggr_funcMAX	[0.00, 0.00, 12.00] 0.79 / 1.88
SELECT_n_of_aggr_funcCOUNT_DISTINCT	[0.00, 0.00, 12.00] 0.84 / 1.94
SELECT_n_of_aggr_funcSUM	
θ	928 (93%)
1	48 (4.8%)
2	$17 \ (1.7\%)$
3	6~(0.6%)
4	1~(0.1%)
SELECT_n_of_aggr_funcAVG	
0	945 (95%)
1	$36 \ (3.6\%)$
2	$13 \ (1.3\%)$
3	6~(0.6%)
SELECT_n_of_all_aggr_func	[0.00, 3.00, 13.00] 3.39 / 3.05
FROM_n_of_join_paths	
1	$176 \ (18\%)$
2	181 (18%)
3	$150 \ (15\%)$
4	155~(16%)
5	$167 \ (17\%)$
6	171 (17%)
FROM_n_of_super_joinsFULL	
0	536 (54%)

Query parameter or value	Descriptive statistics
1	308 (31%)
2	112 (11%)
3	$35\ (3.5\%)$
4	8 (0.8%)
5	1 (0.1%)
FROM_n_of_super_joinsRIGHT	
0	577 (58%)
1	291 (29%)
2	107 (11%)
3	18 (1.8%)
4	7~(0.7%)
FROM_n_of_super_joinsLEFT	
0	568 (57%)
1	305 (31%)
2	$93 \; (9.3\%)$
3	26 (2.6%)
4	8 (0.8%)
FROM_n_of_joinsINNER	[0.00, 3.00, 13.00] 3.31 / 2.49
FROM_n_of_joinsRIGHT	[0.00, 3.00, 11.00] 3.30 / 2.53
FROM_n_of_processed_rows	[5, 9,300,661, 45,103,606] $11,831,188 / 9,695,664$
WHERE_n_of_predicates	[0.00, 3.00, 13.00] 3.76 / 2.93
$WHERE_n_of_attribs_of_type__character$	
0	645~(65%)
1	245 (25%)
2	87 (8.7%)
3	$17 \ (1.7\%)$
4	6~(0.6%)
$WHERE_n_of_attribs_of_type__character_$	_varying
0	372 (37%)
1	276 (28%)
2	183 (18%)
3	109 (11%)
4	38 (3.8%)
5	$16 \ (1.6\%)$
6	5~(0.5%)
7	1 (0.1%)
$WHERE_n_of_attribs_of_type__integer$	
0	371 (37%)
1	323~(32%)
2	172~(17%)
3	83~(8.3%)
4	33~(3.3%)
5	11 (1.1%)
6	4~(0.4%)
7	2~(0.2%)
8	1 (0.1%)

Query parameter or value	Descriptive statistics
WHERE_n_of_attribs_of_typenumeric	
0	571 (57%)
1	279 (28%)
2	105 (11%)
3	$33\ (3.3\%)$
4	10 (1.0%)
6	2~(0.2%)
$WHERE_n_of_attribs_of_type__date$	
0	798 (80%)
1	163~(16%)
2	$39 \; (3.9\%)$
$WHERE_n_of_pkey_attribs$	
0	552~(55%)
1	288 (29%)
2	115 (12%)
3	37 (3.7%)
4	5 (0.5%)
5	1 (0.1%)
6	2 (0.2%)
WHERE_n_of_connect_OR	$[0.00, 1.00, 11.00] \ 2.15 \ / \ 2.42$
WHERE_n_of_operatorsbetween	200 (200)
0	520 (52%)
1	320 (32%)
2	113 (11%)
3	36 (3.6%)
4	9 (0.9%)
5 6	1 (0.1%)
	1 (0.1%)
WHERE_n_of_operatorsgreater_or_less 0	343 (34%)
1	263 (26%)
2	203 (20%)
3	105 (11%)
4	57 (5.7%)
5	15 (1.5%)
$\frac{6}{6}$	13 (1.3%)
$\frac{\circ}{\gamma}$	3(0.3%)
WHERE n of operators like	3 (0.07.0)
0	804 (80%)
1	166 (17%)
2	24 (2.4%)
3	6 (0.6%)
WHERE_n_of_operatorsin	X
0	526~(53%)
1	286 (29%)
2	$130\ (13\%)$
	` /

Query parameter or value	Descriptive statistics
3	41 (4.1%)
4	14(1.4%)
5	2(0.2%)
6	1 (0.1%)
WHERE_n_of_non_aggr_funcSQRT	
0	881 (88%)
1	112 (11%)
2	7 (0.7%)
WHERE_n_of_non_aggr_funcLOG	
θ	929~(93%)
1	67~(6.7%)
2	4~(0.4%)
$WHERE_n_of_non_aggr_func__TRUNC$	
θ	955~(96%)
1	$44 \ (4.4\%)$
2	1~(0.1%)
WHERE_n_of_non_aggr_funcDOW	
θ	968~(97%)
1	31 (3.1%)
2	1 (0.1%)
WHERE_n_of_non_aggr_funcFLOOR	
0	962~(96%)
1	$37 \; (3.7\%)$
2	$1 \; (0.1\%)$
WHERE_n_of_non_aggr_funcMONTH	
θ	968~(97%)
1	$32 \; (3.2\%)$
WHERE_n_of_non_aggr_funcYEAR	
0	971 (97%)
1	27 (2.7%)
2	2(0.2%)
WHERE_n_of_non_aggr_funcROUND	001 (000)
0	961 (96%)
1	37 (3.7%)
2 HHIDDE C ADG	2(0.2%)
WHERE_n_of_non_aggr_funcABS	040 (0507)
0	949 (95%)
1	51 (5.1%)
WHERE_n_of_non_aggr_funcDAY	000 (0007)
0	960 (96%)
1	40 (4.0%)
WHERE_n_of_all_non_aggr_func	694 (6907)
0	634 (63%)
1	242 (24%)
2	104 (10%)
3	16 (1.6%)

Query parameter or value	Descriptive statistics
4	4 (0.4%)
GROUP_BY_n_of_columns	[0.00, 2.00, 11.00] $[0.94]$ $[0.83]$
HAVING_n_of_main_predicates	
0	466~(47%)
1	180 (18%)
2	177 (18%)
3	177 (18%)
ORDER_BY_n_of_columns	,
0	293~(29%)
1	$321\ (32\%)$
2	$235\ (24\%)$
3	106 (11%)
4	$23\ (2.3\%)$
5	$16\ (1.6\%)$
6	5 (0.5%)
γ	1(0.1%)
limit	[4, 514, 999] 508 / 286
offset	[0, 16, 999] 247 / 315