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

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## Scenario: 1-3jp_rjjp__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
```

Query parameter or value	Descriptive statistics
SELECT_n_of_columns	[1, 6, 109] 10 / 14
SELECT_n_of_non_aggr_funcLOWER	
0	715~(72%)
1	$224\ (22\%)$
2	46 (4.6%)
3	7 (0.7%)
4	3~(0.3%)
Ď	4(0.4%)
	1 (0.1%)
ELECT_n_of_non_aggr_funcUPPER	
	702 (70%)
!	$231\ (23\%)$
	51 (5.1%)
}	9 (0.9%)
4	3(0.3%)

Query parameter or value	Descriptive statistics
5	4 (0.4%)
SELECT_n_of_non_aggr_funcYEAR	,
0	874 (87%)
1	102 (10%)
2	$12\ (1.2\%)$
3	6~(0.6%)
4	4~(0.4%)
5	$2 \; (0.2\%)$
SELECT_n_of_non_aggr_funcLTRIM	
0	721~(72%)
1	223~(22%)
2	39~(3.9%)
3	$12 \ (1.2\%)$
4	4~(0.4%)
5	1 (0.1%)
SELECT_n_of_non_aggr_funcDOW	
0	902 (90%)
1	77 (7.7%)
2	15~(1.5%)
3	1~(0.1%)
4	4~(0.4%)
5	1~(0.1%)
SELECT_n_of_non_aggr_funcMONTH	
0	853~(85%)
1	111 (11%)
2	$19 \ (1.9\%)$
3	$15 \ (1.5\%)$
6	2~(0.2%)
SELECT_n_of_non_aggr_funcFLOOR	(a a (V)
0	957 (96%)
1	36 (3.6%)
2	6 (0.6%)
3 CDL DCD	1 (0.1%)
SELECT_n_of_non_aggr_funcRTRIM	222 (728)
0	696 (70%)
1	240 (24%)
2	44 (4.4%)
3	14 (1.4%)
4	6~(0.6%)
SELECT_n_of_non_aggr_funcTRUNC	041 (0407)
0	941 (94%)
1	52 (5.2%)
2	6 (0.6%)
3	1 (0.1%)
SELECT_n_of_non_aggr_funcSUBSTR	700 (710/)
0	709 (71%)

Query parameter or value	Descriptive statistics
1	225 (23%)
2	52(5.2%)
3	$12\;(1.2\%)$
4	1 (0.1%)
8	1(0.1%)
SELECT_n_of_non_aggr_funcROUND	
0	940 (94%)
1	58 (5.8%)
2	2 (0.2%)
$SELECT_n_of_non_aggr_func__SQRT$	
0	854 (85%)
1	$116 \; (12\%)$
2	20~(2.0%)
3	$8 \; (0.8\%)$
4	1 (0.1%)
6	1 (0.1%)
SELECT_n_of_non_aggr_funcABS	4 . 40
0	949 (95%)
1	46 (4.6%)
2	4(0.4%)
3	$1\ (0.1\%)$
SELECT_n_of_non_aggr_funcDAY	017 (0007)
0	917 (92%)
1	70 (7.0%)
2	10 (1.0%)
3 SELECT n of non agent time. LOC	3~(0.3%)
SELECT_n_of_non_aggr_funcLOG 0	912 (91%)
1	76 (7.6%)
2	9 (0.9%)
3	2 (0.2%)
4	1 (0.1%)
SELECT_n_of_all_non_aggr_func	[0.00, 2.00, 37.00] $[0.00, 4.18]$
SELECT_n_of_aggr_funcCOUNT_DISTINCT	[0.00, 2.00, 01.00] 0.00 / 1.10
0	753 (75%)
1	80 (8.0%)
2	57 (5.7%)
3	$42\ (4.2\%)$
4	$33\ (3.3\%)$
5	$22\ (2.2\%)$
6	6 (0.6%)
7	6(0.6%)
8	1(0.1%)
SELECT_n_of_aggr_funcSUM	. ,
0	942 (94%)
1	38 (3.8%)

Query parameter or value	Descriptive statistics
2	13 (1.3%)
3	4 (0.4%)
4	$3\ (0.3\%)$
SELECT_n_of_aggr_funcMAX	,
0	769~(77%)
1	88 (8.8%)
2	43~(4.3%)
3	$46 \; (4.6\%)$
4	18 (1.8%)
5	$13 \ (1.3\%)$
6	$13 \ (1.3\%)$
7	7~(0.7%)
8	3~(0.3%)
SELECT_n_of_aggr_funcMIN	[0.00, 0.00, 10.00] 0.64 / 1.51
$SELECT_n_of_aggr_func__COUNT$	$[0.00,0.00,10.00]\;0.62\;/\;1.44$
$SELECT_n_of_aggr_func__AVG$	
0	$951\ (95\%)$
1	$36 \ (3.6\%)$
2	$11\ (1.1\%)$
3	2~(0.2%)
SELECT_n_of_all_aggr_func	[0.00, 2.00, 11.00] 2.66 / 2.30
FROM_n_of_join_paths	(2-20)
1	319 (32%)
2	314 (31%)
3	$367 \ (37\%)$
FROM_n_of_super_joinsRIGHT	- 10 (- 10)
0	742 (74%)
1	231 (23%)
2 EDOM (:: LEET	27~(2.7%)
FROM_n_of_super_joinsLEFT	700 (7007)
0	780 (78%)
1	202 (20%)
2 EDOM in of gunon ioing EULI	18 (1.8%)
FROM_n_of_super_joinsFULL 0	750 (75%)
1	228 (23%)
2	228 (23%) $22 (2.2%)$
FROM_n_of_joinsINNER	22 (2.270)
	229 (23%)
1	251 (25%)
2	230 (23%)
3	137 (14%)
4	76 (7.6%)
5 5	49 (4.9%)
6	17 (1.7%)
$\frac{\sigma}{\gamma}$	10 (1.0%)
•	10 (1.0/0)

Query parameter or value	Descriptive statistics
8	1 (0.1%)
FROM_n_of_joinsRIGHT	
0	241 (24%)
1	239 (24%)
2	238 (24%)
3	145~(15%)
4	76 (7.6%)
5	37 (3.7%)
6	19 (1.9%)
7	5~(0.5%)
$FROM_n_of_processed_rows$	$[5,6,\!820,\!641,22,\!951,\!858]$ $6,\!772,\!098$ / $6,\!057,\!657$
$WHERE_n_of_predicates$	[0.00, 2.00, 9.00] 2.83 / 2.21
$WHERE_n_of_attribs_of_type__character_$	_varying
0	434~(43%)
1	313~(31%)
2	162~(16%)
3	70 (7.0%)
4	$19 \ (1.9\%)$
5	2~(0.2%)
WHERE_n_of_attribs_of_typeinteger	
0	426~(43%)
1	$331\ (33\%)$
2	$172\ (17\%)$
3	$49 \ (4.9\%)$
4	17 (1.7%)
5	4 (0.4%)
6	1 (0.1%)
WHERE_n_of_attribs_of_typenumeric	07.1 (07.01)
0	654 (65%)
1	248 (25%)
2	80 (8.0%)
3	16 (1.6%)
4	$2\;(0.2\%)$
WHERE_n_of_attribs_of_typedate	000 (0007)
0	829 (83%)
1	159 (16%)
2 WHEDE is of attributed from a character	12~(1.2%)
WHERE_n_of_attribs_of_typecharacter	794 (7907)
0	724 (72%)
1 2	$\begin{array}{c} 222\ (22\%) \\ 48\ (4.8\%) \end{array}$
<i>z</i> <i>3</i>	48 (4.8%) 6 (0.6%)
WHERE_n_of_pkey_attribs	0 (0.0/0)
0	612 (61%)
1	300 (30%)
2	72 (7.2%)
$\boldsymbol{\omega}$	12 (1.270)

Query parameter or value	Descriptive statistics
3	14 (1.4%)
4	1 (0.1%)
6	1 (0.1%)
$WHERE_n_of_connect_OR$	
0	467~(47%)
1	$175 \ (18\%)$
2	$131 \ (13\%)$
3	85~(8.5%)
4	71 (7.1%)
5	$43 \ (4.3\%)$
6	$21 \ (2.1\%)$
7	4 (0.4%)
8	3~(0.3%)
WHERE_n_of_operatorsbetween	ann (ant)
0	603 (60%)
1	285 (29%)
2	75 (7.5%)
3	26 (2.6%)
4	10 (1.0%)
WHIEDE as of assertion and local	1 (0.1%)
WHERE_n_of_operatorsgreater_or_less	202 (2007)
$egin{array}{c} 0 \ 1 \end{array}$	393 (39%) 331 (33%)
2	157 (16%)
3	79 (7.9%)
	32 (3.2%)
<i>4 5</i>	7 (0.7%)
6	1 (0.1%)
WHERE_n_of_operatorsin	1 (0.170)
0	624~(62%)
1	262 (26%)
2	93 (9.3%)
3	17 (1.7%)
4	4 (0.4%)
WHERE_n_of_operatorslike	,
0	830 (83%)
1	159 (16%)
2	$10\ (1.0\%)$
3	1 (0.1%)
$WHERE_n_of_non_aggr_func__MONTH$	
0	979 (98%)
1	$21 \ (2.1\%)$
WHERE_n_of_non_aggr_funcABS	
0	968~(97%)
1	$32 \ (3.2\%)$
WHERE_n_of_non_aggr_funcDOW	

Query parameter or value	Descriptive statistics
0	972 (97%)
1	$28\ (2.8\%)$
WHERE_n_of_non_aggr_funcSQRT	,
0	890 (89%)
1	104 (10%)
2	6 (0.6%)
WHERE_n_of_non_aggr_funcLOG	,
0	942 (94%)
1	57 (5.7%)
2	1 (0.1%)
WHERE_n_of_non_aggr_funcTRUNC	` ,
0	975 (98%)
1	$24\ (2.4\%)$
2	1 (0.1%)
WHERE_n_of_non_aggr_funcFLOOR	` ,
0	969~(97%)
1	30 (3.0%)
2	1 (0.1%)
WHERE_n_of_non_aggr_funcROUND	,
0	973~(97%)
1	$27\ (2.7\%)$
WHERE_n_of_non_aggr_funcYEAR	,
0	974 (97%)
1	$26\ (2.6\%)$
WHERE_n_of_non_aggr_funcDAY	,
0	984 (98%)
1	16 (1.6%)
WHERE_n_of_all_non_aggr_func	,
0	700 (70%)
1	$229\ (23\%)$
2	59(5.9%)
3	$12\ (1.2\%)$
GROUP_BY_n_of_columns	$[0.00, 2.00, 10.00] \ 2.34 \ / \ 2.12$
HAVING_n_of_main_predicates	. ,
0	440 (44%)
1	194 (19%)
2	182 (18%)
3	184 (18%)
ORDER_BY_n_of_columns	,
0	315 (32%)
1	373 (37%)
2	$223\ (22\%)$
3	62 (6.2%)
4	15 (1.5%)
5	9 (0.9%)
6	3~(0.3%)
	/

Query parameter or value	Descriptive statistics
limit	[2, 514, 997] 511 / 291
offset	[0, 69, 997] $268 / 327$