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: 0.01 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, 6, 103] 10 / 12
SELECT_n_of_non_aggr_funcLOWER	
0	712 (71%)
1	$224\ (22\%)$
2	$42\ (4.2\%)$
3	14(1.4%)
4	$2\;(0.2\%)$
5	4(0.4%)
7	1 (0.1%)
8	1(0.1%)
SELECT_n_of_non_aggr_funcLTRIM	` ,
0	691 (69%)
1	231 (23%)
2	$56\ (5.6\%)$
3	11 (1.1%)
	` ,

Query parameter or value	Descriptive statistics
4	6 (0.6%)
5	$3\;(0.3\%)$
6	2~(0.2%)
SELECT_n_of_non_aggr_funcRTRIM	
0	686 (69%)
1	235 (24%)
2	63~(6.3%)
3	12 (1.2%)
4	2~(0.2%)
5	1 (0.1%)
6	1 (0.1%)
SELECT_n_of_non_aggr_funcSQRT	
0	856~(86%)
1	$117 \ (12\%)$
2	$16 \ (1.6\%)$
3	8~(0.8%)
4	3~(0.3%)
SELECT_n_of_non_aggr_funcUPPER	
0	706 (71%)
1	215~(22%)
2	59 (5.9%)
3	$13 \ (1.3\%)$
4	4~(0.4%)
5	3~(0.3%)
SELECT_n_of_non_aggr_funcSUBSTR	
0	668~(67%)
1	263~(26%)
2	54 (5.4%)
3	$13 \ (1.3\%)$
4	2~(0.2%)
SELECT_n_of_non_aggr_funcFLOOR	
0	936 (94%)
1	57 (5.7%)
2	6~(0.6%)
3	1 (0.1%)
SELECT_n_of_non_aggr_funcLOG	
0	914 (91%)
1	69~(6.9%)
2	11 (1.1%)
3	6~(0.6%)
SELECT_n_of_non_aggr_funcDAY	
0	910 (91%)
1	76 (7.6%)
2	10 (1.0%)
3	3~(0.3%)
5	1 (0.1%)

Query parameter or value	Descriptive statistics
SELECT_n_of_non_aggr_funcMONTH	
0	830 (83%)
1	136 (14%)
2	$22\ (2.2\%)$
3	$9\ (0.9\%)^{'}$
4	2(0.2%)
5	1(0.1%)
SELECT_n_of_non_aggr_funcYEAR	,
0	866 (87%)
1	107 (11%)
2	21 (2.1%)
3	$5~(0.5\%)^{'}$
4	1 (0.1%)
SELECT_n_of_non_aggr_funcDOW	(/
	885 (89%)
1	94 (9.4%)
2	18 (1.8%)
3	2 (0.2%)
5	1 (0.1%)
SELECT_n_of_non_aggr_funcABS	(- , ,)
0	944 (94%)
1	51 (5.1%)
2	5(0.5%)
SELECT_n_of_non_aggr_funcROUND	(/
0	968 (97%)
1	29 (2.9%)
2	$2\;\stackrel{(}{(}0.2\%)^{'}$
3	$1\ (0.1\%)$
SELECT_n_of_non_aggr_funcTRUNC	,
0	946 (95%)
1	50 (5.0%)
2	4 (0.4%)
SELECT_n_of_all_non_aggr_func	$[0.0, 2.0, 47.0] \ 3.2 \ / \ 4.2$
SELECT_n_of_aggr_func_AVG	ι , , , , , , ,
	939~(94%)
1	$43\ (4.3\%)$
2	15(1.5%)
3	2 (0.2%)
4	1 (0.1%)
SELECT_n_of_aggr_funcCOUNT	[0.00, 0.00, 9.00] 0.66 / 1.51
SELECT_n_of_aggr_funcMAX	[0.00, 0.00, 0.00] $[0.00 / 1.50]$
SELECT_n_of_aggr_funcMIN	[0.00, 0.00, 9.00] 0.58 / 1.33
SELECT_n_of_aggr_funcCOUNT_DISTINCT	[0.00, 0.00, 3.00] $[0.00, 0.00, 10.00]$ $[0.00, 0.00, 10.00]$
SELECT_n_of_aggr_funcSUM	[0.00, 0.00, 10.00] 0.00 / 1.10
θ	928 (93%)
1	56 (5.6%)
1	00 (0.070)

Query parameter or value	Descriptive statistics
2	10 (1.0%)
3	$6~(0.6\%)^{'}$
SELECT_n_of_all_aggr_func	[0.00, 2.00, 10.00] $2.72 / 2.27$
FROM_n_of_join_paths	
1	307 (31%)
2	347 (35%)
3	346 (35%)
FROM_n_of_super_joinsRIGHT	
0	776~(78%)
1	198~(20%)
2	26~(2.6%)
FROM_n_of_super_joinsLEFT	
θ	757~(76%)
1	224~(22%)
2	19 (1.9%)
FROM_n_of_super_joinsFULL	
0	777 (78%)
1	193~(19%)
2	$30 \ (3.0\%)$
FROM_n_of_joinsINNER	
0	210~(21%)
1	250~(25%)
2	209~(21%)
3	$180 \ (18\%)$
4	87 (8.7%)
5	$44 \ (4.4\%)$
6	$12\ (1.2\%)$
7	8~(0.8%)
FROM_n_of_joinsRIGHT	(2.204)
0	255 (26%)
1	274 (27%)
2	197 (20%)
3	140 (14%)
4	71 (7.1%)
5	36 (3.6%)
6	20 (2.0%)
γ	5 (0.5%)
8 EDOM 6	2 (0.2%)
FROM_n_of_processed_rows	[5, 68,318, 230,115] 64,703 / 59,712
WHERE_n_of_predicates	[0.00, 3.00, 9.00] 2.82 / 2.15
WHERE_n_of_attribs_of_typecharacter_varying	407 (4107)
0	407 (41%)
1	332 (33%)
2	179 (18%)
3	64 (6.4%)
4	$15 \ (1.5\%)$

Query parameter or value	Descriptive statistics
5	3 (0.3%)
WHERE_n_of_attribs_of_typeinteger	,
0	445~(45%)
1	338 (34%)
2	$146 \ (15\%)$
3	$46 \ (4.6\%)$
4	23~(2.3%)
5	2~(0.2%)
$WHERE_n_of_attribs_of_type__character$	
θ	731 (73%)
1	209~(21%)
2	49~(4.9%)
3	$10 \ (1.0\%)$
4	1~(0.1%)
$WHERE_n_of_attribs_of_type__numeric$	
0	651~(65%)
1	265~(27%)
2	66~(6.6%)
3	$14 \ (1.4\%)$
4	4~(0.4%)
WHERE_n_of_attribs_of_typedate	
0	$830 \ (83\%)$
1	$146 \ (15\%)$
2	$21\ (2.1\%)$
3	3~(0.3%)
WHERE_n_of_pkey_attribs	
θ	$618 \; (62\%)$
1	279 (28%)
2	86 (8.6%)
3	15 (1.5%)
4	$2\;(0.2\%)$
WHERE_n_of_connect_OR	(1504)
0	446 (45%)
1	193 (19%)
2	140 (14%)
3	97 (9.7%)
4	56 (5.6%)
5	43 (4.3%)
6	20 (2.0%)
7	4 (0.4%)
8	1 (0.1%)
WHERE_n_of_operatorsbetween	400 (0181)
0	608 (61%)
1	273 (27%)
2	99 (9.9%)
3	18 (1.8%)

Query parameter or value	Descriptive statistics
4	2 (0.2%)
$WHERE_n_of_operators__greater_or_less$	
0	419 (42%)
1	298~(30%)
2	185 (19%)
3	62~(6.2%)
4	$24\ (2.4\%)$
5	9~(0.9%)
6	3~(0.3%)
WHERE_n_of_operatorslike	
0	821 (82%)
1	157 (16%)
2	19 (1.9%)
3	2(0.2%)
4	1~(0.1%)
WHERE_n_of_operatorsin	ann (a184)
0	608 (61%)
1	276 (28%)
2	98 (9.8%)
3	16 (1.6%)
4	$2\;(0.2\%)$
WHERE_n_of_non_aggr_funcLOG	026 (0407)
0	936 (94%)
1	63 (6.3%)
WHERE n of non agen fund. SORT	1 (0.1%)
WHERE_n_of_non_aggr_funcSQRT 0	010 (01%)
1	910 (91%) 81 (8.1%)
2	8 (0.8%)
3	1 (0.1%)
WHERE_n_of_non_aggr_funcDOW	1 (0.170)
0	973 (97%)
1	26 (2.6%)
2	1 (0.1%)
WHERE_n_of_non_aggr_funcTRUNC	1 (0.170)
0	968 (97%)
1	32 (3.2%)
WHERE_n_of_non_aggr_funcYEAR	02 (0.270)
0	970 (97%)
1	30 (3.0%)
WHERE_n_of_non_aggr_funcROUND	30 (3.070)
0	973 (97%)
1	26 (2.6%)
2	1 (0.1%)
WHERE_n_of_non_aggr_funcMONTH	- (~/~)
0	970 (97%)
•	3.0 (3.70)

Query parameter or value	Descriptive statistics
1	30 (3.0%)
WHERE n of non aggr func ABS	,
0	970 (97%)
1	$30 \ (3.0\%)$
WHERE_n_of_non_aggr_funcDAY	, ,
0	974 (97%)
1	$25 \ (2.5\%)$
2	1 (0.1%)
WHERE_n_of_non_aggr_funcFLOOR	` ,
0	975 (98%)
1	$23\ (2.3\%)$
2	$2\;(0.2\%)$
WHERE n of all non aggr func	` ,
0	694~(69%)
1	237 (24%)
2	$53\ (5.3\%)$
3	$12\ (1.2\%)$
4	$2\;(0.2\%)$
5	$2\;(0.2\%)$
GROUP_BY_n_of_columns	[0.00, 2.00, 10.00] $[2.38 / 2.17]$
HAVING_n_of_main_predicates	
0	455~(46%)
1	176 (18%)
2	200 (20%)
3	169 (17%)
ORDER_BY_n_of_columns	
0	315 (32%)
1	392 (39%)
2	211 (21%)
3	69~(6.9%)
4	4~(0.4%)
5	6~(0.6%)
6	$2\ (0.2\%)$
8	1 (0.1%)
limit	[1, 483, 999] 492 / 289
offset	[0, 0, 993] 235 / 314