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: 2 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, 179] 16 / 24	
SELECT_n_of_non_aggr_funcRTRIM		
0	631~(63%)	
1	243~(24%)	
2	75 (7.5%)	
3	22~(2.2%)	
4	$16 \ (1.6\%)$	
5	7 (0.7%)	
6	3~(0.3%)	
7	2~(0.2%)	
8	1 (0.1%)	
SELECT_n_of_non_aggr_funcSUBSTR		
0	610 (61%)	
1	266~(27%)	
2	81 (8.1%)	

Query parameter or value	Descriptive statistics
3	17 (1.7%)
4	$13\ (1.3\%)$
5	8 (0.8%)
6	5~(0.5%)
SELECT_n_of_non_aggr_funcDOW	,
0	835 (84%)
1	125~(13%)
2	24 (2.4%)
3	$12 \ (1.2\%)$
4	1~(0.1%)
5	3~(0.3%)
SELECT_n_of_non_aggr_funcMONTH	
0	813 (81%)
1	128~(13%)
2	$31 \ (3.1\%)$
3	$9\;(0.9\%)$
4	$8 \; (0.8\%)$
5	$6\;(0.6\%)$
6	$3\;(0.3\%)$
7	$2\;(0.2\%)$
SELECT_n_of_non_aggr_funcUPPER	[0.00, 0.00, 11.00] 0.63 / 1.11
SELECT_n_of_non_aggr_funcYEAR	
0	829 (83%)
1	124 (12%)
2	27 (2.7%)
3	10 (1.0%)
4	5(0.5%)
5	2(0.2%)
	3~(0.3%)
SELECT_n_of_non_aggr_funcLTRIM	FOO (400)
0	599 (60%)
1	260 (26%)
2	91 (9.1%)
3	24 (2.4%)
4	15 (1.5%)
5 6	8 (0.8%)
7	2(0.2%)
	1 (0.1%)
SELECT_n_of_non_aggr_funcLOG 0	849 (85%)
1	118 (12%)
2	118 (12%) 19 (1.9%)
3	9 (0.9%)
	2 (0.2%)
<i>4 5</i>	2(0.2%) $2(0.2%)$
7	1 (0.2%)
1	1 (0.1/0)

Query parameter or value	Descriptive statistics
SELECT_n_of_non_aggr_funcLOWER	
0	612 (61%)
1	$258\ (26\%)$
2	75 (7.5%)
3	$24\ (2.4\%)$
4	14(1.4%)
5	8 (0.8%)
6	$4\ (0.4\%)$
7	$2\;(0.2\%)$
8	$3\ (0.3\%)$
SELECT_n_of_non_aggr_funcDAY	,
0	907 (91%)
1	70 (7.0%)
2	$14 \ (1.4\%)$
3	$5~(0.5\%)^{'}$
4	$3\ (0.3\%)$
6	1 (0.1%)
SELECT_n_of_non_aggr_funcABS	` ,
0	919~(92%)
1	$68 \ (6.8\%)$
2	7 (0.7%)
3	4(0.4%)
4	$2\;(0.2\%)$
SELECT_n_of_non_aggr_funcFLOOR	` ,
0	919 (92%)
1	$68 \; (6.8\%)$
2	11 (1.1%)
3	1 (0.1%)
4	1 (0.1%)
SELECT_n_of_non_aggr_funcSQRT	
0	818 (82%)
1	129 (13%)
10	1~(0.1%)
2	$23 \ (2.3\%)$
3	$14 \ (1.4\%)$
4	8~(0.8%)
5	4~(0.4%)
6	2~(0.2%)
8	1 (0.1%)
SELECT_n_of_non_aggr_funcROUND	
0	929 (93%)
1	63~(6.3%)
2	6~(0.6%)
3	1~(0.1%)
4	1~(0.1%)
SELECT_n_of_non_aggr_funcTRUNC	

Query parameter or value	Descriptive statistics
0	921 (92%)
1	67 (6.7%)
2	8 (0.8%)
3	4 (0.4%)
SELECT_n_of_all_non_aggr_func	[0.0, 3.0, 71.0] $4.9 / 7.5$
SELECT_n_of_aggr_funcCOUNT	[0.00, 0.00, 11.00] 0.85 / 1.92
SELECT_n_of_aggr_funcMAX	[0.00, 0.00, 12.00] 0.85 / 1.99
SELECT_n_of_aggr_funcCOUNT_DISTINCT	$[0.00, 0.00, 12.00] \ 0.81 \ / \ 1.86$
SELECT_n_of_aggr_funcMIN	$[0.00, 0.00, 13.00] \ 0.85 \ / \ 1.91$
SELECT_n_of_aggr_funcAVG	,
0	933~(93%)
1	41 (4.1%)
2	23~(2.3%)
3	3 (0.3%)
SELECT_n_of_aggr_funcSUM	, ,
0	923~(92%)
1	$42\ (4.2\%)$
2	$26\ (2.6\%)$
3	$5~(0.5\%)^{'}$
4	3~(0.3%)
5	1 (0.1%)
SELECT_n_of_all_aggr_func	$[0.0, 3.0, 14.0] \ 3.6 \ / \ 3.1$
FROM_n_of_join_paths	
1	166~(17%)
2	169 (17%)
3	$163\ (16\%)$
4	162 (16%)
5	165 (17%)
6	175 (18%)
FROM_n_of_super_joinsFULL	
0	535~(54%)
1	314 (31%)
2	121~(12%)
3	28 (2.8%)
4	2 (0.2%)
FROM_n_of_super_joinsRIGHT	
0	540~(54%)
1	311 (31%)
2	121~(12%)
3	27~(2.7%)
4	1 (0.1%)
FROM_n_of_super_joinsLEFT	
0	554~(55%)
1	303 (30%)
2	115~(12%)
3	27 (2.7%)

Query parameter or value	Descriptive statistics
4	1 (0.1%)
FROM_n_of_joinsINNER	[0.00, 3.00, 15.00] $3.28 / 2.49$
FROM_n_of_joinsRIGHT	$[0.00, 3.00, 12.00] \ 3.24 \ / \ 2.46$
$FROM_n_of_processed_rows$	[5, 18,555,550, 85,114,719] $23,159,188 / 19,452,406$
$WHERE_n_of_predicates$	[0.0,3.0,13.0]3.9/3.0
$WHERE_n_of_attribs_of_type__$	_charactervarying
0	354~(35%)
1	295~(30%)
2	$176 \ (18\%)$
3	95~(9.5%)
4	49 (4.9%)
5	23 (2.3%)
6	7~(0.7%)
γ	1~(0.1%)
$WHERE_n_of_attribs_of_type__$	_date
0	783~(78%)
1	182~(18%)
2	$30 \ (3.0\%)$
3	$4 \; (0.4\%)$
4	1~(0.1%)
WHERE_n_of_attribs_of_type	
0	369~(37%)
1	$299 \; (30\%)$
2	174 (17%)
3	101 (10%)
4	$31 \ (3.1\%)$
5	17 (1.7%)
6	5~(0.5%)
7	4~(0.4%)
WHERE_n_of_attribs_of_type	
0	560 (56%)
1	282 (28%)
2	113 (11%)
3	$34\ (3.4\%)$
4	8 (0.8%)
5	3~(0.3%)
WHERE_n_of_attribs_of_type	
0	669 (67%)
1	249 (25%)
2	62 (6.2%)
3	17 (1.7%)
4	$3\;(0.3\%)$
WHERE_n_of_pkey_attribs	F40 /F407\
0	543 (54%)
1	299 (30%)
2	$115 \; (12\%)$

Query parameter or value	Descriptive statistics
3	32 (3.2%)
4	8 (0.8%)
5	3~(0.3%)
WHERE_n_of_connect_OR	[0.00, 1.00, 12.00] $[2.20 / 2.50]$
WHERE_n_of_operatorsbetween	
0	512 (51%)
1	320 (32%)
2	114 (11%)
3	35 (3.5%)
4	$18 \ (1.8\%)$
5	1~(0.1%)
WHERE_n_of_operatorsgreater_or_less	
0	$318 \; (32\%)$
1	282~(28%)
2	181 (18%)
3	$100 \ (10\%)$
4	70 (7.0%)
5	$33\ (3.3\%)$
6	$13\ (1.3\%)$
7	$1\ (0.1\%)$
8	2~(0.2%)
WHERE_n_of_operatorsin	200 (2104)
0	539 (54%)
1	289 (29%)
2	124 (12%)
3	38 (3.8%)
4	8 (0.8%)
5 WHEDE is of apprehensible	2~(0.2%)
WHERE_n_of_operatorslike	796 (7007)
0 1	786 (79%) 187 (19%)
2	25 (2.5%)
3	25 (2.5%) $2 (0.2%)$
WHERE_n_of_non_aggr_funcSQRT	2 (0.270)
0	861 (86%)
1	123 (12%)
2	14 (1.4%)
<i>3</i>	2(0.2%)
WHERE_n_of_non_aggr_funcDOW	2 (0.270)
0	953 (95%)
1	46 (4.6%)
2	1 (0.1%)
WHERE_n_of_non_aggr_funcABS	(/
0	960 (96%)
1	38 (3.8%)
2	2(0.2%)

Query parameter or value	Descriptive statistics
WHERE_n_of_non_aggr_funcYEAR	
0	965 (97%)
1	$35\ (3.5\%)$
WHERE_n_of_non_aggr_funcLOG	` ,
0	936 (94%)
1	58 (5.8%)
2	$6\ (0.6\%)$
WHERE_n_of_non_aggr_funcFLOOR	, ,
0	963~(96%)
1	36 (3.6%)
2	1 (0.1%)
WHERE_n_of_non_aggr_funcROUND	, ,
0	958 (96%)
1	$42\ (4.2\%)$
WHERE_n_of_non_aggr_funcTRUNC	, ,
0	959 (96%)
1	39 (3.9%)
2	2(0.2%)
WHERE_n_of_non_aggr_funcMONTH	,
0	967 (97%)
1	$32\ (3.2\%)$
2	1(0.1%)
WHERE_n_of_non_aggr_funcDAY	, ,
0	972 (97%)
1	28 (2.8%)
WHERE_n_of_all_non_aggr_func	
0	613 (61%)
1	277 (28%)
2	$83 \ (8.3\%)$
3	$16 \ (1.6\%)$
4	9~(0.9%)
5	2~(0.2%)
GROUP_BY_n_of_columns	[0.00, 2.00, 12.00] 3.04 / 2.95
HAVING_n_of_main_predicates	
0	468~(47%)
1	197 (20%)
2	$150 \ (15\%)$
3	185 (19%)
ORDER_BY_n_of_columns	
0	271 (27%)
1	345 (35%)
2	245~(25%)
3	104 (10%)
4	23~(2.3%)
5	8 (0.8%)
6	2~(0.2%)

Query parameter or value	Descriptive statistics
8	1 (0.1%)
9	1 (0.1%)
limit	[2, 500, 998] 505 / 284
offset	[0, 0, 995] 251 / 324