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

```
## Scenario: 1-1jp__g_hOss_hOnss

## Scale factor: 50 GB

## The 1000-query pack was generated on: 2023-11-04

## 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	[1.0, 4.0, 40.0] 5.6 / 5.0
SELECT_n_of_non_aggr_funcRTRIM	
0	771 (77%)
1	193 (19%)
2	$32 \ (3.2\%)$
3	3~(0.3%)
4	1 (0.1%)
SELECT_n_of_non_aggr_funcSUBSTR	,
0	787 (79%)
1	190 (19%)
2	$22\ (2.2\%)$
4	1 (0.1%)
SELECT_n_of_non_aggr_funcLOWER	,
0	809 (81%)
1	161 (16%)

Query parameter or value	Descriptive statistics
2	28 (2.8%)
3	2(0.2%)
SELECT_n_of_non_aggr_funcLTRIM	
0	789 (79%)
1	184 (18%)
2	23~(2.3%)
3	4~(0.4%)
SELECT_n_of_non_aggr_funcUPPER	
θ	792~(79%)
1	$191 \ (19\%)$
2	$14\ (1.4\%)$
3	3~(0.3%)
SELECT_n_of_non_aggr_funcDOW	
θ	$943\ (94\%)$
1	51 (5.1%)
2	5 (0.5%)
3	1~(0.1%)
SELECT_n_of_non_aggr_funcSQRT	
0	909 (91%)
1	83 (8.3%)
2	6 (0.6%)
3	1 (0.1%)
4	1~(0.1%)
SELECT_n_of_non_aggr_funcTRUNC	0.00 (0.004)
0	966 (97%)
1	33 (3.3%)
2 CIEL ECIE (XEAD	1~(0.1%)
SELECT_n_of_non_aggr_funcYEAR	091 (0907)
0	921 (92%)
1	72(7.2%)
2 SELECT p of non agent time LOC	7 (0.7%)
SELECT_n_of_non_aggr_funcLOG 0	957 (96%)
1	40 (4.0%)
2	3(0.3%)
SELECT_n_of_non_aggr_funcMONTH	3 (0.370)
0	903 (90%)
1	84 (8.4%)
2	12 (1.2%)
~ 3	1 (0.1%)
SELECT_n_of_non_aggr_funcFLOOR	1 (0.170)
0	960 (96%)
1	40 (4.0%)
SELECT_n_of_non_aggr_funcROUND	(,)
0	953 (95%)
1	47 (4.7%)
	, ,

Query parameter or value	Descriptive statistics
SELECT_n_of_non_aggr_funcDAY	
0 = 0 = 0 = 0	945 (95%)
1	48 (4.8%)
2	7 (0.7%)
SELECT_n_of_non_aggr_funcABS	,
0	979 (98%)
1	$21\ (2.1\%)$
SELECT_n_of_all_non_aggr_func	$[0.00, 1.00, 16.00] \ 1.82 \ / \ 1.91$
SELECT_n_of_aggr_funcCOUNT_DISTINCT	
0	791 (79%)
1	112 (11%)
2	48 (4.8%)
3	30 (3.0%)
4	14 (1.4%)
5	3~(0.3%)
6	2~(0.2%)
SELECT_n_of_aggr_funcMIN	
0	761~(76%)
1	124 (12%)
2	65~(6.5%)
3	$33 \; (3.3\%)$
4	10~(1.0%)
5	$2\;(0.2\%)$
6	5~(0.5%)
SELECT_n_of_aggr_funcCOUNT	
0	767 (77%)
1	116 (12%)
2	60 (6.0%)
3	37 (3.7%)
4	12 (1.2%)
5	5 (0.5%)
6	2(0.2%)
7 OFFI DOTE OF A MAN	1~(0.1%)
SELECT_n_of_aggr_funcMAX	700 (7007)
0	792 (79%)
1	108 (11%)
2	60 (6.0%)
3	15 (1.5%)
4	15 (1.5%)
5	6 (0.6%)
6	1 (0.1%)
7 CELECT p of comp fine CHM	3~(0.3%)
SELECT_n_of_aggr_funcSUM	056 (0607)
0	956 (96%)
1	38 (3.8%)
2	6~(0.6%)

Query parameter or value	Descriptive statistics
SELECT_n_of_aggr_funcAVG	
0	947 (95%)
1	46~(4.6%)
2	5~(0.5%)
3	2~(0.2%)
SELECT_n_of_all_aggr_func	
0	213 (21%)
1	290 (29%)
2	228~(23%)
3	144 (14%)
4	74~(7.4%)
5	32 (3.2%)
6	$12 \ (1.2\%)$
γ	7 (0.7%)
$FROM_n_of_join_paths$	
1	$1,000\ (100\%)$
FROM_n_of_joinsINNER	
0	458~(46%)
1	334 (33%)
2	161 (16%)
3	41 (4.1%)
4	6~(0.6%)
FROM_n_of_joinsRIGHT	
0	527~(53%)
1	322~(32%)
2	$122\ (12\%)$
3	$27 \; (2.7\%)$
4	2~(0.2%)
$FROM_n_of_processed_rows$	$[5, 40,\!490,\!376, 382,\!516,\!427]$ $128,\!798,\!705$ /
	152,978,113
WHERE_n_of_predicates	
0	227~(23%)
1	254~(25%)
2	244~(24%)
3	$143 \ (14\%)$
4	87 (8.7%)
5	$36 \; (3.6\%)$
6	9~(0.9%)
WHERE_n_of_attribs_of_typecharacter	
0	541 (54%)
1	$332 \ (33\%)$
2	101 (10%)
3	$21 \ (2.1\%)$
4	4~(0.4%)
5	1 (0.1%)
$WHERE_n_of_attribs_of_type__integer$	

Query parameter or value	Descriptive statistics
0	563 (56%)
1	319~(32%)
2	102 (10%)
3	$16\ (1.6\%)$
WHERE_n_of_attribs_of_typenumeric	,
0	759 (76%)
1	196 (20%)
2	41 (4.1%)
3	4 (0.4%)
WHERE_n_of_attribs_of_typecharacter	
0	845 (85%)
1	$143 \ (14\%)$
2	11 (1.1%)
3	1 (0.1%)
WHERE_n_of_attribs_of_typedate	
0	901 (90%)
1	92 (9.2%)
2	7 (0.7%)
$WHERE_n_of_pkey_attribs$	
0	708 (71%)
1	255~(26%)
2	35 (3.5%)
3	2~(0.2%)
$WHERE_n_of_connect_OR$	
0	636~(64%)
1	$211 \ (21\%)$
2	91 (9.1%)
3	$51 \ (5.1\%)$
4	7 (0.7%)
5	4~(0.4%)
WHERE_n_of_operatorsgreater_or_less	
0	553 (55%)
1	286 (29%)
2	$119 \ (12\%)$
3	34 (3.4%)
4	8 (0.8%)
WHERE_n_of_operatorsin	7 00 (7 0M)
0	730 (73%)
1	229 (23%)
2	37 (3.7%)
	4 (0.4%)
WHERE_n_of_operatorsbetween	200 (2014)
0	728 (73%)
1	221 (22%)
2	44 (4.4%)
3	6~(0.6%)

Query parameter or value	Descriptive statistics
5	1 (0.1%)
WHERE_n_of_operatorslike	,
0	886 (89%)
1	111 (11%)
2	2~(0.2%)
3	1 (0.1%)
WHERE_n_of_non_aggr_funcSQRT	
θ	939 (94%)
1	$61 \ (6.1\%)$
WHERE_n_of_non_aggr_funcLOG	0.50 (0.004)
0	958 (96%)
1	41 (4.1%)
2 WHERE 6 COUNT	1 (0.1%)
WHERE_n_of_non_aggr_funcROUND	007 (0007)
0	987 (99%)
1	12 (1.2%)
2 WHERE n of non aggr func DAY	1 (0.1%)
WHERE_n_of_non_aggr_funcDAY 0	981 (98%)
1	19 (1.9%)
WHERE_n_of_non_aggr_funcTRUNC	$19\ (1.970)$
	980 (98%)
1	20 (2.0%)
WHERE_n_of_non_aggr_funcYEAR	20 (2.070)
0	993 (99%)
1	7 (0.7%)
WHERE_n_of_non_aggr_funcABS	(' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '
0	986 (99%)
1	14 (1.4%)
WHERE_n_of_non_aggr_funcFLOOR	,
0	982 (98%)
1	18 (1.8%)
$WHERE_n_of_non_aggr_func__MONTH$	
0	$986 \ (99\%)$
1	$14 \ (1.4\%)$
WHERE_n_of_non_aggr_funcDOW	
θ	986 (99%)
1	$14 \ (1.4\%)$
WHERE_n_of_all_non_aggr_func	(2-24)
0	801 (80%)
1	177 (18%)
2	20 (2.0%)
3	1 (0.1%)
4 CDOUD DV ()	1 (0.1%)
GROUP_BY_n_of_columns	060 (0704)
0	268~(27%)

Query parameter or value	Descriptive statistics
1	258 (26%)
2	207 (21%)
3	$164\ (16\%)$
4	68~(6.8%)
5	28 (2.8%)
6	7 (0.7%)
HAVING_n_of_main_predicates	
0	450 (45%)
1	161 (16%)
2	193 (19%)
3	196 (20%)
ORDER_BY_n_of_columns	
0	284 (28%)
1	470 (47%)
2	$212\ (21\%)$
3	$24\ (2.4\%)$
4	$8 \; (0.8\%)$
5	2~(0.2%)
limit	[1, 522, 1,000] 512 / 289
offset	[0, 0, 1,000] 242 / 323