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

```
## Scenario: 1-1jp__ng

## Scale factor: 0.01 GB

## The 1000-query pack was generated on: 2023-11-08

## 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)
```

Descriptive statistics
[1, 6, 43] 10 / 9
913 (91%)
69 (6.9%)
14 (1.4%)
4 (0.4%)
,
850 (85%)
107 (11%)
35~(3.5%)
8 (0.8%)
,
930 (93%)
64 (6.4%)
6 (0.6%)

- for higher cardinality parameters: [min, median, max] mean / SD

Query parameter or value	Descriptive statistics
SELECT_n_of_non_aggr_funcSQRT	
0	821 (82%)
1	137 (14%)
2	34 (3.4%)
3	7~(0.7%)
4	1 (0.1%)
SELECT_n_of_non_aggr_funcSUBSTR	
0	810 (81%)
1	146~(15%)
2	34 (3.4%)
3	8 (0.8%)
4	$1\ (0.1\%)$
6	$1\ (0.1\%)$
SELECT_n_of_non_aggr_funcUPPER	
0	789~(79%)
1	164~(16%)
2	37 (3.7%)
3	6 (0.6%)
4	$3\ (0.3\%)$
5	$1\ (0.1\%)$
SELECT_n_of_non_aggr_funcYEAR	,
0	883 (88%)
1	88 (8.8%)
2	$24\ (2.4\%)$
3	5 (0.5%)
SELECT_n_of_non_aggr_funcFLOOR	,
0	940 (94%)
1	55~(5.5%)
2	4 (0.4%)
3	1 (0.1%)
SELECT_n_of_non_aggr_funcLOWER	
0	791 (79%)
1	172 (17%)
2	33 (3.3%)
3	4 (0.4%)
SELECT_n_of_non_aggr_funcLTRIM	
0	778 (78%)
1	175 (18%)
2	$36\ (3.6\%)$
3	7 (0.7%)
4	$3\;(0.3\%)$
5	1~(0.1%)
SELECT_n_of_non_aggr_funcRTRIM	` '
0 = 0	794 (79%)
	146 (15%)
1	140 (10/0)

Query parameter or value	Descriptive statistics
3	11 (1.1%)
4	$2\;(0.2\%)$
SELECT_n_of_non_aggr_funcTRUNC	,
0	955~(96%)
1	$42\ (4.2\%)$
2	3~(0.3%)
SELECT_n_of_non_aggr_funcABS	
0	935~(94%)
1	62~(6.2%)
2	2~(0.2%)
3	1~(0.1%)
SELECT_n_of_non_aggr_funcDOW	
0	887~(89%)
1	$93 \; (9.3\%)$
2	$17 \ (1.7\%)$
3	3~(0.3%)
SELECT_n_of_non_aggr_funcLOG	
θ	900 (90%)
1	86 (8.6%)
2	10 (1.0%)
3	4 (0.4%)
SELECT_n_of_all_non_aggr_func	$[0.0, 1.0, 22.0] \ 2.5 \ / \ 3.7$
SELECT_n_of_aggr_funcMAX	(
0	924 (92%)
1	34 (3.4%)
2	20 (2.0%)
3	15 (1.5%)
4	4(0.4%)
5	3~(0.3%)
SELECT_n_of_aggr_funcCOUNT	007 (0207)
0	927 (93%)
1	26 (2.6%)
2	22 (2.2%)
3	19 (1.9%) 4 (0.4%)
4 6	4 (0.4%) $2 (0.2%)$
SELECT_n_of_aggr_funcMIN	2 (0.270)
0	937 (94%)
1	28 (2.8%)
2	28 (2.6%) $27 (2.7%)$
3	3 (0.3%)
	3 (0.3%)
<i>4 5</i>	2 (0.3%)
SELECT_n_of_aggr_funcCOUNT_DISTINCT	2 (0.270)
0	933 (93%)
1	36 (3.6%)
•	00 (0.070)

Query parameter or value	Descriptive statistics
2	14 (1.4%)
3	$13\ (1.3\%)$
4	$2\;(0.2\%)$
5	2~(0.2%)
SELECT_n_of_aggr_funcSUM	
0	986~(99%)
1	9~(0.9%)
2	5~(0.5%)
SELECT_n_of_aggr_funcAVG	
0	989 (99%)
1	$10 \ (1.0\%)$
2	1~(0.1%)
SELECT_n_of_all_aggr_func	
0	$750 \ (75\%)$
1	84~(8.4%)
2	73~(7.3%)
3	52 (5.2%)
4	28~(2.8%)
5	7~(0.7%)
6	5~(0.5%)
γ	1 (0.1%)
FROM_n_of_join_paths	
1	$1,000 \ (100\%)$
FROM_n_of_joinsINNER	
0	480 (48%)
1	348 (35%)
2	134 (13%)
3	$35 \ (3.5\%)$
4	$3\;(0.3\%)$
FROM_n_of_joinsRIGHT	100 (1004)
0	492 (49%)
1	342 (34%)
2	126 (13%)
3	34 (3.4%)
4	6 (0.6%)
FROM_n_of_processed_rows WHERE_n_of_predicates	$[5, 10,000, 76,705] \ 26,723 \ / \ 30,626$
0	215~(22%)
1	245 (25%)
2	226~(23%)
3	158~(16%)
4	$98 \; (9.8\%)$
5	41 (4.1%)
6	17 (1.7%)
$WHERE_n_of_attribs_of_type__integer$	
0	543~(54%)

Query parameter or value	Descriptive statistics
1	329 (33%)
2	110 (11%)
3	16 (1.6%)
4	$2\ (0.2\%)$
WHERE_n_of_attribs_of_typedate	
0	891 (89%)
1	$98 \; (9.8\%)$
2	$10 \ (1.0\%)$
3	1 (0.1%)
WHERE_n_of_attribs_of_typenumeric	,
0	736~(74%)
1	$213\ (21\%)$
2	47 (4.7%)
3	4 (0.4%)
WHERE_n_of_attribs_of_typecharacter	, ,
0 = 0	834 (83%)
1	131 (13%)
2	$32\ (3.2\%)$
3	3 (0.3%)
WHERE_n_of_attribs_of_typecharacter_varying	,
0 = 0	541 (54%)
1	$325\ (33\%)$
2	108 (11%)
3	$24\ (2.4\%)$
4	2(0.2%)
WHERE_n_of_pkey_attribs	(
0	690 (69%)
1	$257\ (26\%)$
2	51 (5.1%)
3	2 (0.2%)
WHERE_n_of_connect_OR	()
0 $=$ $=$ $=$ 0	590 (59%)
1	$224\ (22\%)$
2	113 (11%)
3	54 (5.4%)
4	11 (1.1%)
5	8 (0.8%)
WHERE_n_of_operatorsgreater_or_less	((- 1, 0)
0 = 0	528 (53%)
1	314 (31%)
$\frac{1}{2}$	123 (12%)
3	29 (2.9%)
4	6 (0.6%)
WHERE_n_of_operatorsbetween	- (0.0,0)
0	699 (70%)
1	247 (25%)
	(/)

Query parameter or value	Descriptive statistics
2	48 (4.8%)
3	6~(0.6%)
WHERE_n_of_operatorslike	,
0	880 (88%)
1	114 (11%)
2	6 (0.6%)
WHERE_n_of_operatorsin	
0	692~(69%)
1	255~(26%)
2	48 (4.8%)
3	5 (0.5%)
WHERE_n_of_non_aggr_funcABS	` '
0	978 (98%)
1	$22\;(2.2\%)$
WHERE_n_of_non_aggr_funcMONTH	,
0	983~(98%)
1	17 (1.7%)
WHERE_n_of_non_aggr_funcLOG	,
θ	965~(97%)
1	34 (3.4%)
2	1 (0.1%)
WHERE_n_of_non_aggr_funcSQRT	,
0 $=$ $=$ $=$ $=$ $=$ $=$ $=$ $=$ $=$ $=$	936 (94%)
1	61 (6.1%)
2	3 (0.3%)
WHERE_n_of_non_aggr_funcDOW	- ()
0 = 0	984 (98%)
1	16 (1.6%)
WHERE_n_of_non_aggr_funcTRUNC	(1,0)
0 = 0	982 (98%)
1	18 (1.8%)
WHERE_n_of_non_aggr_funcROUND	- (-, 0)
0	976 (98%)
1	24 (2.4%)
WHERE_n_of_non_aggr_funcDAY	(-·-/v)
0	983 (98%)
1	16 (1.6%)
z	1 (0.1%)
WHERE_n_of_non_aggr_funcYEAR	- (0.270)
0	983 (98%)
1	17 (1.7%)
WHERE_n_of_non_aggr_funcFLOOR	(-··/·/)
0	977 (98%)
1	23 (2.3%)
WHERE_n_of_all_non_aggr_func	25 (2.570)
0	785 (79%)
v	100 (10/0)

Query parameter or value	Descriptive statistics
1	174 (17%)
2	39 (3.9%)
3	2~(0.2%)
GROUP_BY_n_of_columns	
0	$1,000 \ (100\%)$
HAVING_n_of_main_predicates	
0	$1,000 \ (100\%)$
ORDER_BY_n_of_columns	
0	439 (44%)
1	287 (29%)
2	161 (16%)
3	80 (8.0%)
4	29~(2.9%)
5	4~(0.4%)
limit	[4, 513, 1,000] 500 / 289
offset	$[0,0,1{,}000]$ 252 / 324