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

Scenario: 1-3jp_ujjp__g__h0-3ss_h0nss

Scale factor: 10 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, 105] 10 / 13
SELECT_n_of_non_aggr_func___LOWER	
0	703 (70%)
1	225 (23%)
2	47 (4.7%)
3	18 (1.8%)
4	5 (0.5%)
5	1 (0.1%)
6	1 (0.1%)
SELECT_n_of_non_aggr_func___RTRIM	
0	700 (70%)
1	229 (23%)
2	53 (5.3%)
3	9 (0.9%)
4	6 (0.6%)

Query parameter or value	Descriptive statistics
5	3 (0.3%)
SELECT_n_of_non_aggr_func___LTRIM	
0	706 (71%)
1	227 (23%)
2	47 (4.7%)
3	11 (1.1%)
4	6 (0.6%)
5	2 (0.2%)
7	1 (0.1%)
SELECT_n_of_non_aggr_func___SUBSTR	
0	707 (71%)
1	222 (22%)
2	50 (5.0%)
3	14 (1.4%)
4	5 (0.5%)
5	1 (0.1%)
6	1 (0.1%)
SELECT_n_of_non_aggr_func___UPPER	
0	658 (66%)
1	262 (26%)
2	61 (6.1%)
3	16 (1.6%)
4	2 (0.2%)
6	1 (0.1%)
SELECT_n_of_non_aggr_func___ROUND	
0	948 (95%)
1	49 (4.9%)
2	3 (0.3%)
SELECT_n_of_non_aggr_func___FLOOR	
0	942 (94%)
1	53 (5.3%)
2	5 (0.5%)
SELECT_n_of_non_aggr_func___ABS	
0	941 (94%)
1	56 (5.6%)
2	3 (0.3%)
SELECT_n_of_non_aggr_func___DOW	
0	895 (90%)
1	85 (8.5%)
2	17 (1.7%)
3	2 (0.2%)
4	1 (0.1%)
SELECT_n_of_non_aggr_func___YEAR	
0	886 (89%)
1	81 (8.1%)
2	24 (2.4%)

Query parameter or value	Descriptive statistics
3	3 (0.3%)
4	3 (0.3%)
5	3 (0.3%)
SELECT_n_of_non_aggr_func___DAY	
0	935 (94%)
1	56 (5.6%)
2	6 (0.6%)
3	3 (0.3%)
SELECT_n_of_non_aggr_func___LOG	
0	901 (90%)
1	76 (7.6%)
2	16 (1.6%)
3	6 (0.6%)
4	1 (0.1%)
SELECT_n_of_non_aggr_func___MONTH	
0	873 (87%)
1	90 (9.0%)
2	25 (2.5%)
3	8 (0.8%)
4	2 (0.2%)
5	2 (0.2%)
SELECT_n_of_non_aggr_func___SQRT	
0	847 (85%)
1	119 (12%)
2	25 (2.5%)
3	6 (0.6%)
4	3 (0.3%)
SELECT_n_of_non_aggr_func___TRUNC	
0	950 (95%)
1	46 (4.6%)
2	3 (0.3%)
3	1 (0.1%)
SELECT_n_of_all_non_aggr_func	[0.0, 2.0, 41.0] 3.2 / 4.3
SELECT_n_of_aggr_func___COUNT_DISTINCT	[0.00, 0.00, 9.00] 0.59 / 1.32
SELECT_n_of_aggr_func___MIN	[0.00, 0.00, 9.00] 0.65 / 1.46
SELECT_n_of_aggr_func___AVG	
0	939 (94%)
1	43 (4.3%)
2	15 (1.5%)
3	2 (0.2%)
4	1 (0.1%)
SELECT_n_of_aggr_func___MAX	
0	752 (75%)
1	75 (7.5%)
2	57 (5.7%)
3	50 (5.0%)

Query parameter or value	Descriptive statistics
4	39 (3.9%)
5	16 (1.6%)
6	6 (0.6%)
7	3 (0.3%)
9	2 (0.2%)
SELECT_n_of_aggr_func___COUNT	
0	780 (78%)
1	89 (8.9%)
2	50 (5.0%)
3	31 (3.1%)
4	16 (1.6%)
5	18 (1.8%)
6	10 (1.0%)
7	3 (0.3%)
8	3 (0.3%)
SELECT_n_of_aggr_func___SUM	
0	930 (93%)
1	58 (5.8%)
2	11 (1.1%)
3	1 (0.1%)
SELECT_n_of_all_aggr_func	[0.00, 2.00, 11.00] 2.60 / 2.16
FROM_n_of_join_paths	
1	344 (34%)
2	332 (33%)
3	324 (32%)
FROM_n_of_super_joins___LEFT	
0	790 (79%)
1	194 (19%)
2	16 (1.6%)
FROM_n_of_super_joins___FULL	
0	780 (78%)
1	202 (20%)
2	18 (1.8%)
FROM_n_of_super_joins___RIGHT	
0	769 (77%)
1	211 (21%)
2	20 (2.0%)
FROM_n_of_joins___INNER	
0	264 (26%)
1	250 (25%)
2	208 (21%)
3	127 (13%)
4	91 (9.1%)
5	36 (3.6%)
6	19 (1.9%)
7	5 (0.5%)

Query parameter or value	Descriptive statistics
FROM_n_of_joins___RIGHT	
0	232 (23%)
1	289 (29%)
2	198 (20%)
3	145 (15%)
4	84 (8.4%)
5	34 (3.4%)
6	15 (1.5%)
7	2 (0.2%)
8	1 (0.1%)
FROM_n_of_processed_rows	[5, 68,079,151, 229,441,534] 63,326,691 / 60,177,851
WHERE_n_of_predicates	[0.00, 2.00, 10.00] 2.75 / 2.22
WHERE_n_of_attribs_of_type___character	
0	743 (74%)
1	211 (21%)
2	40 (4.0%)
3	5 (0.5%)
4	1 (0.1%)
WHERE_n_of_attribs_of_type___character_varying	
0	449 (45%)
1	299 (30%)
2	168 (17%)
3	59 (5.9%)
4	21 (2.1%)
5	4 (0.4%)
WHERE_n_of_attribs_of_type___date	
0	823 (82%)
1	159 (16%)
2	17 (1.7%)
3	1 (0.1%)
WHERE_n_of_attribs_of_type___integer	
0	450 (45%)
1	312 (31%)
2	151 (15%)
3	65 (6.5%)
4	16 (1.6%)
5	5 (0.5%)
6	1 (0.1%)
WHERE_n_of_attribs_of_type___numeric	
0	673 (67%)
1	249 (25%)
2	65 (6.5%)
3	12 (1.2%)
4	1 (0.1%)
WHERE_n_of_pkey_attribs	
0	616 (62%)

Query parameter or value	Descriptive statistics
1	279 (28%)
2	82 (8.2%)
3	22 (2.2%)
4	1 (0.1%)
WHERE_n_of_connect_OR	
0	473 (47%)
1	183 (18%)
2	121 (12%)
3	101 (10%)
4	60 (6.0%)
5	29 (2.9%)
6	24 (2.4%)
7	8 (0.8%)
8	1 (0.1%)
WHERE_n_of_operators___in	
0	634 (63%)
1	259 (26%)
2	86 (8.6%)
3	15 (1.5%)
4	5 (0.5%)
5	1 (0.1%)
WHERE_n_of_operators___like	
0	828 (83%)
1	157 (16%)
2	15 (1.5%)
WHERE_n_of_operators___greater_or_less	
0	405 (41%)
1	295 (30%)
2	185 (19%)
3	69 (6.9%)
4	30 (3.0%)
5	13 (1.3%)
6	3 (0.3%)
WHERE_n_of_operators___between	
0	643 (64%)
1	251 (25%)
2	83 (8.3%)
3	21 (2.1%)
4	2 (0.2%)
WHERE_n_of_non_aggr_func___SQRT	
0	912 (91%)
1	80 (8.0%)
2	8 (0.8%)
WHERE_n_of_non_aggr_func___DAY	
0	974 (97%)
1	25 (2.5%)

Query parameter or value	Descriptive statistics
2	1 (0.1%)
WHERE_n_of_non_aggr_func___MONTH	
0	964 (96%)
1	36 (3.6%)
WHERE_n_of_non_aggr_func___DOW	
0	971 (97%)
1	29 (2.9%)
WHERE_n_of_non_aggr_func___TRUNC	
0	976 (98%)
1	23 (2.3%)
2	1 (0.1%)
WHERE_n_of_non_aggr_func___YEAR	
0	970 (97%)
1	30 (3.0%)
WHERE_n_of_non_aggr_func___LOG	
0	942 (94%)
1	55 (5.5%)
2	2 (0.2%)
3	1 (0.1%)
WHERE_n_of_non_aggr_func___ABS	
0	978 (98%)
1	22 (2.2%)
WHERE_n_of_non_aggr_func___ROUND	
0	971 (97%)
1	29 (2.9%)
WHERE_n_of_non_aggr_func___FLOOR	
0	975 (98%)
1	23 (2.3%)
2	2 (0.2%)
WHERE_n_of_all_non_aggr_func	
0	695 (70%)
1	243 (24%)
2	48 (4.8%)
3	12 (1.2%)
4	2 (0.2%)
GROUP_BY_n_of_columns	[0.00, 2.00, 9.00] 2.35 / 2.07
HAVING_n_of_main_predicates	
0	293 (29%)
1	112 (11%)
2	156 (16%)
3	168 (17%)
4	140 (14%)
5	89 (8.9%)
6	42 (4.2%)
HAVING_n_of_main_predicates___scalar_subquery	
0	443 (44%)

Query parameter or value	Descriptive statistics
1	206 (21%)
2	192 (19%)
3	159 (16%)
HAVING_n_of_subqueries___scalar_subquery	[0.0, 1.0, 19.0] 2.2 / 3.3
HAVING_n_of_processed_rows_by_subqueries	[0, 1,649,924, 2,675,282,208] 134,260,549 / 319,157,670
ORDER_BY_n_of_columns	
0	284 (28%)
1	400 (40%)
2	224 (22%)
3	66 (6.6%)
4	16 (1.6%)
5	3 (0.3%)
6	5 (0.5%)
7	1 (0.1%)
8	1 (0.1%)
limit	[2, 510, 997] 508 / 288
offset	[0, 35, 1,000] 261 / 325