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

Scenario: 1-3jp_rjjp__g__h0-3ss_h0-3nss

Scale factor: 10 GB

The 1000-query pack was generated on: 2023-11-06

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, 7, 100] 10 / 13
SELECT_n_of_non_aggr_func___UPPER	
0	697 (70%)
1	231 (23%)
2	60 (6.0%)
3	9 (0.9%)
4	2 (0.2%)
6	1 (0.1%)
SELECT_n_of_non_aggr_func___LOWER	
0	699 (70%)
1	226 (23%)
2	58 (5.8%)
3	11 (1.1%)
4	1 (0.1%)
5	2 (0.2%)

Query parameter or value	Descriptive statistics
6	3 (0.3%)
SELECT_n_of_non_aggr_func___LTRIM	
0	688 (69%)
1	249 (25%)
2	46 (4.6%)
3	12 (1.2%)
4	4 (0.4%)
5	1 (0.1%)
SELECT_n_of_non_aggr_func___SUBSTR	
0	687 (69%)
1	231 (23%)
2	61 (6.1%)
3	16 (1.6%)
4	2 (0.2%)
5	2 (0.2%)
6	1 (0.1%)
SELECT_n_of_non_aggr_func___DAY	
0	919 (92%)
1	63 (6.3%)
2	12 (1.2%)
3	5 (0.5%)
4	1 (0.1%)
SELECT_n_of_non_aggr_func___MONTH	
0	855 (86%)
1	101 (10%)
2	31 (3.1%)
3	9 (0.9%)
4	3 (0.3%)
5	1 (0.1%)
SELECT_n_of_non_aggr_func___ROUND	
0	956 (96%)
1	41 (4.1%)
2	3 (0.3%)
SELECT_n_of_non_aggr_func___TRUNC	
0	937 (94%)
1	56 (5.6%)
2	6 (0.6%)
3	1 (0.1%)
SELECT_n_of_non_aggr_func___YEAR	
0	868 (87%)
1	102 (10%)
2	23 (2.3%)
3	7 (0.7%)
SELECT_n_of_non_aggr_func___RTRIM	
0	702 (70%)
1	229 (23%)

Query parameter or value	Descriptive statistics
2	52 (5.2%)
3	15 (1.5%)
4	2 (0.2%)
SELECT_n_of_non_aggr_func___SQRT	
0	847 (85%)
1	124 (12%)
2	16 (1.6%)
3	9 (0.9%)
4	3 (0.3%)
5	1 (0.1%)
SELECT_n_of_non_aggr_func___LOG	
0	894 (89%)
1	92 (9.2%)
2	12 (1.2%)
3	1 (0.1%)
7	1 (0.1%)
SELECT_n_of_non_aggr_func___DOW	
0	887 (89%)
1	90 (9.0%)
2	15 (1.5%)
3	8 (0.8%)
SELECT_n_of_non_aggr_func___FLOOR	
0	942 (94%)
1	55 (5.5%)
2	3 (0.3%)
SELECT_n_of_non_aggr_func___ABS	
0	942 (94%)
1	53 (5.3%)
2	3 (0.3%)
3	2 (0.2%)
SELECT_n_of_all_non_aggr_func	[0.0, 2.0, 46.0] 3.2 / 4.2
SELECT_n_of_aggr_func___MAX	[0.00, 0.00, 9.00] 0.66 / 1.49
SELECT_n_of_aggr_func___COUNT	[0.00, 0.00, 10.00] 0.66 / 1.48
SELECT_n_of_aggr_func___MIN	
0	771 (77%)
1	78 (7.8%)
2	51 (5.1%)
3	36 (3.6%)
4	25 (2.5%)
5	18 (1.8%)
6	12 (1.2%)
7	7 (0.7%)
8	2 (0.2%)
SELECT_n_of_aggr_func___COUNT_DISTINCT	[0.00, 0.00, 11.00] 0.65 / 1.50
SELECT_n_of_aggr_func___SUM	
0	948 (95%)

Query parameter or value	Descriptive statistics
1	33 (3.3%)
2	14 (1.4%)
3	4 (0.4%)
4	1 (0.1%)
SELECT_n_of_aggr_func___AVG	
0	950 (95%)
1	40 (4.0%)
2	7 (0.7%)
3	3 (0.3%)
SELECT_n_of_all_aggr_func	[0.00, 2.00, 11.00] 2.72 / 2.32
FROM_n_of_join_paths	
1	341 (34%)
2	332 (33%)
3	327 (33%)
FROM_n_of_super_joins___RIGHT	
0	741 (74%)
1	239 (24%)
2	20 (2.0%)
FROM_n_of_super_joins___FULL	
0	786 (79%)
1	198 (20%)
2	16 (1.6%)
FROM_n_of_super_joins___LEFT	
0	774 (77%)
1	199 (20%)
2	27 (2.7%)
FROM_n_of_joins___INNER	
0	241 (24%)
1	233 (23%)
2	237 (24%)
3	145 (15%)
4	91 (9.1%)
5	31 (3.1%)
6	17 (1.7%)
7	5 (0.5%)
FROM_n_of_joins___RIGHT	
0	235 (24%)
1	265 (27%)
2	227 (23%)
3	132 (13%)
4	79 (7.9%)
5	32 (3.2%)
6	21 (2.1%)
7	7 (0.7%)
8	2 (0.2%)
FROM_n_of_processed_rows	[5, 68,079,156, 229,441,529] 64,945,691 / 59,848,394

Query parameter or value	Descriptive statistics
WHERE_n_of_predicates	[0.00, 2.00, 10.00] 2.67 / 2.14
WHERE_n_of_attribs_of_type___character	
0	728 (73%)
1	231 (23%)
2	31 (3.1%)
3	8 (0.8%)
4	1 (0.1%)
5	1 (0.1%)
WHERE_n_of_attribs_of_type___character_varying	
0	472 (47%)
1	296 (30%)
2	163 (16%)
3	49 (4.9%)
4	17 (1.7%)
5	2 (0.2%)
6	1 (0.1%)
WHERE_n_of_attribs_of_type___integer	
0	469 (47%)
1	315 (32%)
2	151 (15%)
3	48 (4.8%)
4	14 (1.4%)
5	2 (0.2%)
6	1 (0.1%)
WHERE_n_of_attribs_of_type___date	
0	835 (84%)
1	154 (15%)
2	11 (1.1%)
WHERE_n_of_attribs_of_type___numeric	
0	651 (65%)
1	244 (24%)
2	83 (8.3%)
3	18 (1.8%)
4	4 (0.4%)
WHERE_n_of_pkey_attribs	
0	639 (64%)
1	272 (27%)
2	71 (7.1%)
3	16 (1.6%)
4	2 (0.2%)
WHERE_n_of_connect_OR	
0	478 (48%)
1	179 (18%)
2	141 (14%)
3	91 (9.1%)
4	55 (5.5%)

Query parameter or value	Descriptive statistics
5	36 (3.6%)
6	17 (1.7%)
7	3 (0.3%)
WHERE_n_of_operators___between	
0	621 (62%)
1	279 (28%)
2	83 (8.3%)
3	14 (1.4%)
4	3 (0.3%)
WHERE_n_of_operators___greater_or_less	
0	441 (44%)
1	303 (30%)
2	154 (15%)
3	74 (7.4%)
4	21 (2.1%)
5	4 (0.4%)
6	3 (0.3%)
WHERE_n_of_operators___in	
0	615 (62%)
1	278 (28%)
2	79 (7.9%)
3	21 (2.1%)
4	7 (0.7%)
WHERE_n_of_operators___like	
0	842 (84%)
1	143 (14%)
2	15 (1.5%)
WHERE_n_of_non_aggr_func___SQRT	
0	904 (90%)
1	92 (9.2%)
2	4 (0.4%)
WHERE_n_of_non_aggr_func___DOW	
0	975 (98%)
1	25 (2.5%)
WHERE_n_of_non_aggr_func___MONTH	
0	973 (97%)
1	27 (2.7%)
WHERE_n_of_non_aggr_func___YEAR	
0	977 (98%)
1	23 (2.3%)
WHERE_n_of_non_aggr_func___TRUNC	
0	972 (97%)
1	27 (2.7%)
2	1 (0.1%)
WHERE_n_of_non_aggr_func___FLOOR	
0	972 (97%)

Query parameter or value	Descriptive statistics
1	26 (2.6%)
2	2 (0.2%)
WHERE_n_of_non_aggr_func___ROUND	
0	968 (97%)
1	32 (3.2%)
WHERE_n_of_non_aggr_func___LOG	
0	950 (95%)
1	49 (4.9%)
2	1 (0.1%)
WHERE_n_of_non_aggr_func___ABS	
0	966 (97%)
1	32 (3.2%)
2	2 (0.2%)
WHERE_n_of_non_aggr_func___DAY	
0	977 (98%)
1	23 (2.3%)
WHERE_n_of_all_non_aggr_func	
0	697 (70%)
1	241 (24%)
2	53 (5.3%)
3	7 (0.7%)
4	2 (0.2%)
GROUP_BY_n_of_columns	[0.00, 2.00, 9.00] 2.29 / 2.07
HAVING_n_of_main_predicates	[0.00, 3.00, 9.00] 3.27 / 2.58
HAVING_n_of_main_predicates___non_scalar_subquery	
0	471 (47%)
1	161 (16%)
2	191 (19%)
3	177 (18%)
HAVING_n_of_main_predicates___scalar_subquery	
0	440 (44%)
1	174 (17%)
2	215 (22%)
3	171 (17%)
HAVING_n_of_subqueries___non_scalar_subquery	
0	471 (47%)
1	161 (16%)
2	191 (19%)
3	177 (18%)
HAVING_n_of_subqueries___scalar_subquery	[0.0, 1.0, 27.0] 2.4 / 3.6
HAVING_n_of_processed_rows_by_subqueries	[0, 33,004,856, 3,050,341,542] 224,383,347 / 406,390,526
ORDER_BY_n_of_columns	
0	297 (30%)
1	376 (38%)
2	234 (23%)

Query parameter or value	Descriptive statistics
3	72 (7.2%)
4	9 (0.9%)
5	9 (0.9%)
6	1 (0.1%)
7	1 (0.1%)
8	1 (0.1%)
limit	[1, 486, 999] 493 / 286
offset	[0, 26, 998] 257 / 324