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

Scenario: 1-3jp_ujjp__g__h0-3ss_h0-3nss

Scale factor: 1 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, 6, 99] 10 / 12
SELECT_n_of_non_aggr_func___SUBSTR	
0	690 (69%)
1	242 (24%)
2	52 (5.2%)
3	9 (0.9%)
4	5 (0.5%)
5	2 (0.2%)
SELECT_n_of_non_aggr_func___UPPER	
0	702 (70%)
1	236 (24%)
2	46 (4.6%)
3	9 (0.9%)
4	4 (0.4%)
5	2 (0.2%)

Query parameter or value	Descriptive statistics
7	1 (0.1%)
SELECT_n_of_non_aggr_func___DOW	
0	900 (90%)
1	80 (8.0%)
2	14 (1.4%)
3	2 (0.2%)
4	4 (0.4%)
SELECT_n_of_non_aggr_func___MONTH	
0	864 (86%)
1	101 (10%)
2	21 (2.1%)
3	8 (0.8%)
4	4 (0.4%)
5	1 (0.1%)
6	1 (0.1%)
SELECT_n_of_non_aggr_func___YEAR	
0	878 (88%)
1	90 (9.0%)
2	23 (2.3%)
3	5 (0.5%)
4	3 (0.3%)
5	1 (0.1%)
SELECT_n_of_non_aggr_func___RTRIM	
0	672 (67%)
1	255 (26%)
2	54 (5.4%)
3	13 (1.3%)
4	5 (0.5%)
5	1 (0.1%)
SELECT_n_of_non_aggr_func___SQRT	
0	849 (85%)
1	124 (12%)
2	22 (2.2%)
3	5 (0.5%)
SELECT_n_of_non_aggr_func___TRUNC	
0	935 (94%)
1	60 (6.0%)
2	4 (0.4%)
3	1 (0.1%)
SELECT_n_of_non_aggr_func___DAY	
0	928 (93%)
1	58 (5.8%)
2	11 (1.1%)
3	2 (0.2%)
4	1 (0.1%)
SELECT_n_of_non_aggr_func___LOWER	

Query parameter or value	Descriptive statistics
0	693 (69%)
1	242 (24%)
2	51 (5.1%)
3	11 (1.1%)
4	3 (0.3%)
SELECT_n_of_non_aggr_func___ROUND	
0	936 (94%)
1	55 (5.5%)
2	8 (0.8%)
3	1 (0.1%)
SELECT_n_of_non_aggr_func___LTRIM	
0	698 (70%)
1	236 (24%)
2	49 (4.9%)
3	10 (1.0%)
4	5 (0.5%)
5	1 (0.1%)
6	1 (0.1%)
SELECT_n_of_non_aggr_func___ABS	
0	943 (94%)
1	50 (5.0%)
2	7 (0.7%)
SELECT_n_of_non_aggr_func___LOG	
0	899 (90%)
1	87 (8.7%)
2	10 (1.0%)
3	3 (0.3%)
4	1 (0.1%)
SELECT_n_of_non_aggr_func___FLOOR	
0	946 (95%)
1	51 (5.1%)
2	3 (0.3%)
SELECT_n_of_all_non_aggr_func	[0.0, 2.0, 44.0] 3.2 / 4.2
SELECT_n_of_aggr_func___COUNT	
0	756 (76%)
1	86 (8.6%)
2	47 (4.7%)
3	42 (4.2%)
4	26 (2.6%)
5	23 (2.3%)
6	13 (1.3%)
7	4 (0.4%)
8	3 (0.3%)
SELECT_n_of_aggr_func___MAX	
0	756 (76%)
1	86 (8.6%)

Query parameter or value	Descriptive statistics
2	65 (6.5%)
3	27 (2.7%)
4	28 (2.8%)
5	19 (1.9%)
6	12 (1.2%)
7	5 (0.5%)
8	2 (0.2%)
SELECT_n_of_aggr_func___COUNT_DISTINCT	[0.00, 0.00, 10.00] 0.66 / 1.43
SELECT_n_of_aggr_func___MIN	[0.00, 0.00, 11.00] 0.66 / 1.53
SELECT_n_of_aggr_func___SUM	
0	946 (95%)
1	37 (3.7%)
2	10 (1.0%)
3	7 (0.7%)
SELECT_n_of_aggr_func___AVG	
0	934 (93%)
1	47 (4.7%)
2	16 (1.6%)
3	3 (0.3%)
SELECT_n_of_all_aggr_func	[0.00, 2.00, 11.00] 2.76 / 2.30
FROM_n_of_join_paths	
1	342 (34%)
2	342 (34%)
3	316 (32%)
FROM_n_of_super_joins___RIGHT	
0	773 (77%)
1	201 (20%)
2	26 (2.6%)
FROM_n_of_super_joins___FULL	
0	797 (80%)
1	186 (19%)
2	17 (1.7%)
FROM_n_of_super_joins___LEFT	
0	761 (76%)
1	217 (22%)
2	22 (2.2%)
FROM_n_of_joins___INNER	
0	262 (26%)
1	277 (28%)
2	201 (20%)
3	137 (14%)
4	67 (6.7%)
5	30 (3.0%)
6	17 (1.7%)
7	5 (0.5%)
8	4 (0.4%)

Query parameter or value	Descriptive statistics
FROM_n_of_joins___RIGHT	[0.00, 1.00, 10.00] 1.73 / 1.51
FROM_n_of_processed_rows	[5, 6,810,591, 22,951,863] 6,254,546 / 5,941,311
WHERE_n_of_predicates	[0.00, 2.00, 10.00] 2.83 / 2.20
WHERE_n_of_attribs_of_type___character	
0	726 (73%)
1	217 (22%)
2	41 (4.1%)
3	13 (1.3%)
4	3 (0.3%)
WHERE_n_of_attribs_of_type___character_varying	
0	434 (43%)
1	317 (32%)
2	162 (16%)
3	72 (7.2%)
4	12 (1.2%)
5	3 (0.3%)
WHERE_n_of_attribs_of_type___integer	
0	441 (44%)
1	335 (34%)
2	137 (14%)
3	68 (6.8%)
4	16 (1.6%)
5	2 (0.2%)
6	1 (0.1%)
WHERE_n_of_attribs_of_type___numeric	
0	659 (66%)
1	248 (25%)
2	68 (6.8%)
3	22 (2.2%)
4	3 (0.3%)
WHERE_n_of_attribs_of_type___date	
0	828 (83%)
1	149 (15%)
2	19 (1.9%)
3	3 (0.3%)
4	1 (0.1%)
WHERE_n_of_pkey_attribs	
0	598 (60%)
1	310 (31%)
2	72 (7.2%)
3	18 (1.8%)
4	2 (0.2%)
WHERE_n_of_connect_OR	
0	448 (45%)
1	194 (19%)
2	135 (14%)

Query parameter or value	Descriptive statistics
3	98 (9.8%)
4	59 (5.9%)
5	41 (4.1%)
6	13 (1.3%)
7	10 (1.0%)
8	2 (0.2%)
WHERE_n_of_operators___between	
0	592 (59%)
1	294 (29%)
2	87 (8.7%)
3	25 (2.5%)
4	1 (0.1%)
5	1 (0.1%)
WHERE_n_of_operators___in	
0	613 (61%)
1	276 (28%)
2	89 (8.9%)
3	19 (1.9%)
4	3 (0.3%)
WHERE_n_of_operators___greater_or_less	
0	416 (42%)
1	304 (30%)
2	163 (16%)
3	78 (7.8%)
4	26 (2.6%)
5	9 (0.9%)
6	3 (0.3%)
8	1 (0.1%)
WHERE_n_of_operators___like	
0	824 (82%)
1	149 (15%)
2	27 (2.7%)
WHERE_n_of_non_aggr_func___SQRT	
0	908 (91%)
1	88 (8.8%)
2	4 (0.4%)
WHERE_n_of_non_aggr_func___ROUND	
0	956 (96%)
1	44 (4.4%)
WHERE_n_of_non_aggr_func___DAY	
0	976 (98%)
1	24 (2.4%)
WHERE_n_of_non_aggr_func___TRUNC	
0	962 (96%)
1	38 (3.8%)
WHERE_n_of_non_aggr_func___LOG	

Query parameter or value	Descriptive statistics
0	941 (94%)
1	59 (5.9%)
WHERE_n_of_non_aggr_func___MONTH	
0	977 (98%)
1	23 (2.3%)
WHERE_n_of_non_aggr_func___YEAR	
0	971 (97%)
1	28 (2.8%)
2	1 (0.1%)
WHERE_n_of_non_aggr_func___ABS	
0	984 (98%)
1	16 (1.6%)
WHERE_n_of_non_aggr_func___FLOOR	
0	973 (97%)
1	27 (2.7%)
WHERE_n_of_non_aggr_func___DOW	
0	977 (98%)
1	20 (2.0%)
2	3 (0.3%)
WHERE_n_of_all_non_aggr_func	
0	702 (70%)
1	234 (23%)
2	47 (4.7%)
3	13 (1.3%)
4	4 (0.4%)
GROUP_BY_n_of_columns	[0.00, 2.00, 10.00] 2.35 / 2.05
HAVING_n_of_main_predicates	[0.00, 4.00, 9.00] 3.36 / 2.50
HAVING_n_of_main_predicates___non_scalar_subquery	
0	421 (42%)
1	181 (18%)
2	198 (20%)
3	200 (20%)
HAVING_n_of_main_predicates___scalar_subquery	
0	438 (44%)
1	196 (20%)
2	176 (18%)
3	190 (19%)
HAVING_n_of_subqueries___non_scalar_subquery	
0	421 (42%)
1	181 (18%)
2	198 (20%)
3	200 (20%)
HAVING_n_of_subqueries___scalar_subquery	[0.0, 1.0, 19.0] 2.4 / 3.6
HAVING_n_of_processed_rows_by_subqueries	[0, 5,205,120, 404,164,732] 22,458,927 / 41,247,340
ORDER_BY_n_of_columns	
0	273 (27%)

Query parameter or value	Descriptive statistics
1	398 (40%)
2	237 (24%)
3	64 (6.4%)
4	17 (1.7%)
5	10 (1.0%)
6	1 (0.1%)
limit	[1, 495, 999] 495 / 288
offset	[0, 42, 996] 257 / 322