

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

Scenario: 1-6jp_ujpp__g__h0-3ss_h0-3nss

Scale factor: 50 GB

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

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, 9, 187] 17 / 27
SELECT_n_of_non_aggr_func__LTRIM	
0	596 (60%)
1	275 (28%)
13	1 (0.1%)
2	83 (8.3%)
3	17 (1.7%)
4	15 (1.5%)
5	7 (0.7%)
6	5 (0.5%)
7	1 (0.1%)
SELECT_n_of_non_aggr_func__MONTH	[0.00, 0.00, 10.00] 0.35 / 0.98
SELECT_n_of_non_aggr_func__YEAR	[0.00, 0.00, 10.00] 0.29 / 0.93
SELECT_n_of_non_aggr_func__ABS	
0	909 (91%)

Query parameter or value	Descriptive statistics
1	71 (7.1%)
2	13 (1.3%)
3	3 (0.3%)
4	4 (0.4%)
SELECT_n_of_non_aggr_func___DOW	
0	863 (86%)
1	94 (9.4%)
2	21 (2.1%)
3	13 (1.3%)
4	3 (0.3%)
5	3 (0.3%)
6	2 (0.2%)
7	1 (0.1%)
SELECT_n_of_non_aggr_func___FLOOR	
0	906 (91%)
1	77 (7.7%)
2	14 (1.4%)
3	3 (0.3%)
SELECT_n_of_non_aggr_func___LOG	
0	867 (87%)
1	94 (9.4%)
2	20 (2.0%)
3	7 (0.7%)
4	8 (0.8%)
5	2 (0.2%)
6	1 (0.1%)
8	1 (0.1%)
SELECT_n_of_non_aggr_func___LOWER	[0.00, 0.00, 9.00] 0.63 / 1.14
SELECT_n_of_non_aggr_func___RTRIM	
0	644 (64%)
1	253 (25%)
2	65 (6.5%)
3	17 (1.7%)
4	9 (0.9%)
5	8 (0.8%)
7	2 (0.2%)
8	2 (0.2%)
SELECT_n_of_non_aggr_func___SUBSTR	[0.00, 0.00, 9.00] 0.63 / 1.09
SELECT_n_of_non_aggr_func___TRUNC	
0	908 (91%)
1	77 (7.7%)
2	10 (1.0%)
3	5 (0.5%)
SELECT_n_of_non_aggr_func___UPPER	[0.00, 0.00, 11.00] 0.57 / 1.05
SELECT_n_of_non_aggr_func___DAY	
0	880 (88%)

Query parameter or value	Descriptive statistics
1	86 (8.6%)
2	23 (2.3%)
3	8 (0.8%)
4	2 (0.2%)
5	1 (0.1%)
SELECT_n_of_non_aggr_func___SQRT	
0	785 (79%)
1	143 (14%)
2	37 (3.7%)
3	13 (1.3%)
4	8 (0.8%)
5	8 (0.8%)
6	4 (0.4%)
8	1 (0.1%)
9	1 (0.1%)
SELECT_n_of_non_aggr_func___ROUND	
0	915 (92%)
1	72 (7.2%)
2	8 (0.8%)
3	5 (0.5%)
SELECT_n_of_all_non_aggr_func	[0, 3, 81] 5 / 8
SELECT_n_of_aggr_func___MAX	[0.00, 0.00, 13.00] 0.83 / 1.85
SELECT_n_of_aggr_func___COUNT	[0.00, 0.00, 11.00] 0.81 / 1.87
SELECT_n_of_aggr_func___MIN	[0.00, 0.00, 12.00] 0.72 / 1.72
SELECT_n_of_aggr_func___COUNT_DISTINCT	[0.00, 0.00, 12.00] 0.89 / 1.95
SELECT_n_of_aggr_func___AVG	
0	940 (94%)
1	41 (4.1%)
2	10 (1.0%)
3	7 (0.7%)
4	1 (0.1%)
5	1 (0.1%)
SELECT_n_of_aggr_func___SUM	
0	937 (94%)
1	36 (3.6%)
2	20 (2.0%)
3	6 (0.6%)
4	1 (0.1%)
SELECT_n_of_all_aggr_func	[0.00, 3.00, 14.00] 3.44 / 2.99
FROM_n_of_join_paths	
1	168 (17%)
2	152 (15%)
3	143 (14%)
4	186 (19%)
5	173 (17%)
6	178 (18%)

Query parameter or value	Descriptive statistics
FROM_n_of_super_joins__RIGHT	
0	551 (55%)
1	301 (30%)
2	122 (12%)
3	19 (1.9%)
4	7 (0.7%)
FROM_n_of_super_joins__LEFT	
0	530 (53%)
1	305 (31%)
2	129 (13%)
3	33 (3.3%)
4	3 (0.3%)
FROM_n_of_super_joins__FULL	
0	553 (55%)
1	306 (31%)
2	107 (11%)
3	33 (3.3%)
4	1 (0.1%)
FROM_n_of_joins__INNER	[0.00, 3.00, 14.00] 3.40 / 2.53
FROM_n_of_joins__RIGHT	[0.00, 3.00, 15.00] 3.31 / 2.43
FROM_n_of_processed_rows	[5, 468,264,244, 2,211,049,523] 612,991,169 / 500,996,160
WHERE_n_of_predicates	[0.00, 4.00, 12.00] 3.95 / 2.99
WHERE_n_of_attribs_of_type__integer	
0	366 (37%)
1	302 (30%)
2	170 (17%)
3	98 (9.8%)
4	42 (4.2%)
5	17 (1.7%)
6	1 (0.1%)
7	4 (0.4%)
WHERE_n_of_attribs_of_type__character_varying	
0	347 (35%)
1	303 (30%)
2	195 (20%)
3	99 (9.9%)
4	29 (2.9%)
5	20 (2.0%)
6	7 (0.7%)
WHERE_n_of_attribs_of_type__date	
0	771 (77%)
1	177 (18%)
2	44 (4.4%)
3	6 (0.6%)
4	2 (0.2%)

Query parameter or value	Descriptive statistics
WHERE_n_of_attribs_of_type__character	
0	638 (64%)
1	232 (23%)
2	97 (9.7%)
3	25 (2.5%)
4	6 (0.6%)
5	2 (0.2%)
WHERE_n_of_attribs_of_type__numeric	
0	571 (57%)
1	267 (27%)
2	115 (12%)
3	34 (3.4%)
4	10 (1.0%)
5	2 (0.2%)
6	1 (0.1%)
WHERE_n_of_pkey_attribs	
0	540 (54%)
1	294 (29%)
2	112 (11%)
3	39 (3.9%)
4	10 (1.0%)
5	3 (0.3%)
6	1 (0.1%)
7	1 (0.1%)
WHERE_n_of_connect_OR	[0.00, 2.00, 11.00] 2.31 / 2.49
WHERE_n_of_operators__between	
0	505 (51%)
1	280 (28%)
2	150 (15%)
3	43 (4.3%)
4	17 (1.7%)
5	2 (0.2%)
6	3 (0.3%)
WHERE_n_of_operators__greater_or_less	
0	318 (32%)
1	259 (26%)
2	200 (20%)
3	128 (13%)
4	59 (5.9%)
5	20 (2.0%)
6	11 (1.1%)
7	4 (0.4%)
8	1 (0.1%)
WHERE_n_of_operators__in	
0	545 (55%)
1	276 (28%)

Query parameter or value	Descriptive statistics
2	121 (12%)
3	40 (4.0%)
4	12 (1.2%)
5	5 (0.5%)
6	1 (0.1%)
WHERE_n_of_operators__like	
0	792 (79%)
1	182 (18%)
2	22 (2.2%)
3	4 (0.4%)
WHERE_n_of_non_aggr_func__MONTH	
0	958 (96%)
1	40 (4.0%)
2	2 (0.2%)
WHERE_n_of_non_aggr_func__LOG	
0	918 (92%)
1	76 (7.6%)
2	6 (0.6%)
WHERE_n_of_non_aggr_func__SQRT	
0	870 (87%)
1	120 (12%)
2	9 (0.9%)
3	1 (0.1%)
WHERE_n_of_non_aggr_func__YEAR	
0	956 (96%)
1	44 (4.4%)
WHERE_n_of_non_aggr_func__DOW	
0	957 (96%)
1	42 (4.2%)
2	1 (0.1%)
WHERE_n_of_non_aggr_func__DAY	
0	960 (96%)
1	40 (4.0%)
WHERE_n_of_non_aggr_func__FLOOR	
0	960 (96%)
1	39 (3.9%)
2	1 (0.1%)
WHERE_n_of_non_aggr_func__TRUNC	
0	961 (96%)
1	38 (3.8%)
3	1 (0.1%)
WHERE_n_of_non_aggr_func__ABS	
0	963 (96%)
1	35 (3.5%)
2	2 (0.2%)
WHERE_n_of_non_aggr_func__ROUND	

Query parameter or value	Descriptive statistics
0	955 (96%)
1	43 (4.3%)
2	2 (0.2%)
WHERE_n_of_all_non_aggr_func	
0	605 (61%)
1	270 (27%)
2	88 (8.8%)
3	29 (2.9%)
4	5 (0.5%)
5	2 (0.2%)
6	1 (0.1%)
GROUP_BY_n_of_columns	[0.00, 2.00, 11.00] 3.10 / 2.92
HAVING_n_of_main_predicates	[0.00, 4.00, 9.00] 3.46 / 2.64
HAVING_n_of_main_predicates__non_scalar_subquery	
0	421 (42%)
1	182 (18%)
2	183 (18%)
3	214 (21%)
HAVING_n_of_main_predicates__scalar_subquery	
0	429 (43%)
1	190 (19%)
2	183 (18%)
3	198 (20%)
HAVING_n_of_subqueries__non_scalar_subquery	
0	421 (42%)
1	182 (18%)
2	183 (18%)
3	214 (21%)
HAVING_n_of_subqueries__scalar_subquery	[0.0, 1.0, 25.0] 2.4 / 3.6
HAVING_n_of_processed_rows_by_subqueries	[0, 685,660,331, 28,229,847,120] 2,179,069,991 / 3,619,516,928
ORDER_BY_n_of_columns	
0	303 (30%)
1	338 (34%)
2	228 (23%)
3	87 (8.7%)
4	25 (2.5%)
5	13 (1.3%)
6	1 (0.1%)
7	2 (0.2%)
8	3 (0.3%)
limit	[1, 515, 1,000] 509 / 292
offset	[0, 0, 999] 243 / 321