

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

Scenario: 1-3jp_rjpp__g__h0-3ss_h0-3nss

Scale factor: 2 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, 6, 98] 10 / 13
SELECT_n_of_non_aggr_func__DAY	
0	911 (91%)
1	77 (7.7%)
2	8 (0.8%)
3	4 (0.4%)
SELECT_n_of_non_aggr_func__DOW	
0	900 (90%)
1	79 (7.9%)
2	14 (1.4%)
3	7 (0.7%)
SELECT_n_of_non_aggr_func__LTRIM	
0	705 (71%)
1	225 (23%)
2	51 (5.1%)

Query parameter or value	Descriptive statistics
3	12 (1.2%)
4	4 (0.4%)
5	3 (0.3%)
SELECT_n_of_non_aggr_func__MONTH	
0	847 (85%)
1	116 (12%)
2	26 (2.6%)
3	7 (0.7%)
4	1 (0.1%)
5	2 (0.2%)
6	1 (0.1%)
SELECT_n_of_non_aggr_func__ROUND	
0	950 (95%)
1	47 (4.7%)
2	2 (0.2%)
3	1 (0.1%)
SELECT_n_of_non_aggr_func__SQRT	
0	870 (87%)
1	98 (9.8%)
2	20 (2.0%)
3	8 (0.8%)
4	4 (0.4%)
SELECT_n_of_non_aggr_func__SUBSTR	
0	689 (69%)
1	237 (24%)
2	54 (5.4%)
3	15 (1.5%)
4	3 (0.3%)
5	2 (0.2%)
SELECT_n_of_non_aggr_func__UPPER	
0	688 (69%)
1	241 (24%)
2	50 (5.0%)
3	12 (1.2%)
4	6 (0.6%)
5	2 (0.2%)
6	1 (0.1%)
SELECT_n_of_non_aggr_func__YEAR	
0	885 (89%)
1	89 (8.9%)
2	16 (1.6%)
3	6 (0.6%)
4	4 (0.4%)
SELECT_n_of_non_aggr_func__RTRIM	
0	709 (71%)
1	222 (22%)

Query parameter or value	Descriptive statistics
2	47 (4.7%)
3	18 (1.8%)
4	2 (0.2%)
5	1 (0.1%)
8	1 (0.1%)
SELECT_n_of_non_aggr_func___LOWER	
0	735 (74%)
1	206 (21%)
2	40 (4.0%)
3	15 (1.5%)
4	3 (0.3%)
6	1 (0.1%)
SELECT_n_of_non_aggr_func___ABS	
0	939 (94%)
1	56 (5.6%)
2	3 (0.3%)
3	2 (0.2%)
SELECT_n_of_non_aggr_func___LOG	
0	892 (89%)
1	86 (8.6%)
2	19 (1.9%)
3	1 (0.1%)
4	1 (0.1%)
6	1 (0.1%)
SELECT_n_of_non_aggr_func___TRUNC	
0	949 (95%)
1	47 (4.7%)
2	3 (0.3%)
3	1 (0.1%)
SELECT_n_of_non_aggr_func___FLOOR	
0	954 (95%)
1	43 (4.3%)
2	2 (0.2%)
3	1 (0.1%)
SELECT_n_of_all_non_aggr_func	[0.0, 2.0, 41.0] 3.1 / 4.4
SELECT_n_of_aggr_func___MAX	
0	748 (75%)
1	93 (9.3%)
2	46 (4.6%)
3	42 (4.2%)
4	28 (2.8%)
5	21 (2.1%)
6	10 (1.0%)
7	6 (0.6%)
8	6 (0.6%)
SELECT_n_of_aggr_func___MIN	[0.00, 0.00, 9.00] 0.55 / 1.34

Query parameter or value	Descriptive statistics
SELECT__n_of_aggr_func__COUNT_DISTINCT	
0	781 (78%)
1	72 (7.2%)
2	62 (6.2%)
3	37 (3.7%)
4	18 (1.8%)
5	18 (1.8%)
6	11 (1.1%)
7	1 (0.1%)
SELECT__n_of_aggr_func__AVG	
0	946 (95%)
1	41 (4.1%)
2	11 (1.1%)
3	1 (0.1%)
4	1 (0.1%)
SELECT__n_of_aggr_func__COUNT	[0.00, 0.00, 9.00] 0.67 / 1.45
SELECT__n_of_aggr_func__SUM	
0	947 (95%)
1	37 (3.7%)
2	12 (1.2%)
3	4 (0.4%)
SELECT__n_of_all_aggr_func	[0.00, 2.00, 10.00] 2.58 / 2.20
FROM__n_of_join_paths	
1	335 (34%)
2	339 (34%)
3	326 (33%)
FROM__n_of_super_joins__LEFT	
0	771 (77%)
1	206 (21%)
2	23 (2.3%)
FROM__n_of_super_joins__RIGHT	
0	767 (77%)
1	215 (22%)
2	18 (1.8%)
FROM__n_of_super_joins__FULL	
0	767 (77%)
1	208 (21%)
2	25 (2.5%)
FROM__n_of_joins__INNER	
0	247 (25%)
1	244 (24%)
2	236 (24%)
3	139 (14%)
4	74 (7.4%)
5	35 (3.5%)
6	17 (1.7%)

Query parameter or value	Descriptive statistics
7	7 (0.7%)
8	1 (0.1%)
FROM_n_of_joins__RIGHT	
0	237 (24%)
1	263 (26%)
2	216 (22%)
3	156 (16%)
4	74 (7.4%)
5	34 (3.4%)
6	18 (1.8%)
7	2 (0.2%)
FROM_n_of_processed_rows	[5, 13,615,801, 45,887,241] 12,932,677 / 11,933,651
WHERE_n_of_predicates	[0.00, 3.00, 9.00] 2.86 / 2.23
WHERE_n_of_attribs_of_type__character	
0	742 (74%)
1	196 (20%)
2	42 (4.2%)
3	19 (1.9%)
4	1 (0.1%)
WHERE_n_of_attribs_of_type__date	
0	832 (83%)
1	133 (13%)
2	28 (2.8%)
3	5 (0.5%)
4	2 (0.2%)
WHERE_n_of_attribs_of_type__integer	
0	450 (45%)
1	317 (32%)
2	166 (17%)
3	53 (5.3%)
4	11 (1.1%)
5	2 (0.2%)
6	1 (0.1%)
WHERE_n_of_attribs_of_type__character_varying	
0	429 (43%)
1	313 (31%)
2	182 (18%)
3	61 (6.1%)
4	11 (1.1%)
5	4 (0.4%)
WHERE_n_of_attribs_of_type__numeric	
0	624 (62%)
1	255 (26%)
2	106 (11%)
3	13 (1.3%)
4	2 (0.2%)

Query parameter or value	Descriptive statistics
WHERE_n_of_pkey_attris	
0	625 (63%)
1	278 (28%)
2	82 (8.2%)
3	14 (1.4%)
4	1 (0.1%)
WHERE_n_of_connect_OR	
0	456 (46%)
1	170 (17%)
2	140 (14%)
3	93 (9.3%)
4	62 (6.2%)
5	51 (5.1%)
6	23 (2.3%)
7	4 (0.4%)
8	1 (0.1%)
WHERE_n_of_operators___greater_or_less	
0	406 (41%)
1	308 (31%)
2	163 (16%)
3	90 (9.0%)
4	19 (1.9%)
5	12 (1.2%)
6	2 (0.2%)
WHERE_n_of_operators___in	
0	609 (61%)
1	283 (28%)
2	77 (7.7%)
3	25 (2.5%)
4	6 (0.6%)
WHERE_n_of_operators___between	
0	619 (62%)
1	270 (27%)
2	85 (8.5%)
3	24 (2.4%)
4	2 (0.2%)
WHERE_n_of_operators___like	
0	838 (84%)
1	146 (15%)
2	16 (1.6%)
WHERE_n_of_non_aggr_func___SQRT	
0	908 (91%)
1	89 (8.9%)
2	2 (0.2%)
3	1 (0.1%)
WHERE_n_of_non_aggr_func___LOG	

Query parameter or value	Descriptive statistics
0	951 (95%)
1	47 (4.7%)
2	2 (0.2%)
WHERE_n_of_non_aggr_func__ROUND	
0	960 (96%)
1	40 (4.0%)
WHERE_n_of_non_aggr_func__MONTH	
0	976 (98%)
1	24 (2.4%)
WHERE_n_of_non_aggr_func__DAY	
0	977 (98%)
1	23 (2.3%)
WHERE_n_of_non_aggr_func__DOW	
0	971 (97%)
1	29 (2.9%)
WHERE_n_of_non_aggr_func__FLOOR	
0	966 (97%)
1	34 (3.4%)
WHERE_n_of_non_aggr_func__TRUNC	
0	971 (97%)
1	29 (2.9%)
WHERE_n_of_non_aggr_func__YEAR	
0	966 (97%)
1	33 (3.3%)
2	1 (0.1%)
WHERE_n_of_non_aggr_func__ABS	
0	964 (96%)
1	36 (3.6%)
WHERE_n_of_all_non_aggr_func	
0	703 (70%)
1	216 (22%)
2	66 (6.6%)
3	11 (1.1%)
4	4 (0.4%)
GROUP_BY_n_of_columns	[0.00, 2.00, 9.00] 2.31 / 2.08
HAVING_n_of_main_predicates	[0.00, 4.00, 9.00] 3.45 / 2.56
HAVING_n_of_main_predicates__scalar_subquery	
0	409 (41%)
1	185 (19%)
2	209 (21%)
3	197 (20%)
HAVING_n_of_main_predicates__non_scalar_subquery	
0	431 (43%)
1	187 (19%)
2	197 (20%)
3	185 (19%)

Query parameter or value	Descriptive statistics
HAVING_n_of_subqueries__scalar_subquery	[0.0, 1.0, 26.0] 2.6 / 3.7
HAVING_n_of_subqueries__non_scalar_subquery	
0	431 (43%)
1	187 (19%)
2	197 (20%)
3	185 (19%)
HAVING_n_of_processed_rows_by_subqueries	[0, 10,399,454, 658,608,900] 49,104,480 / 84,821,288
ORDER_BY_n_of_columns	
0	280 (28%)
1	382 (38%)
2	266 (27%)
3	52 (5.2%)
4	13 (1.3%)
5	5 (0.5%)
6	1 (0.1%)
7	1 (0.1%)
limit	[1, 484, 999] 497 / 286
offset	[0, 25, 1,000] 254 / 323