

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

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

Scale factor: 5 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, 93] 10 / 14
SELECT_n_of_non_aggr_func__LOWER	
0	692 (69%)
1	245 (25%)
2	45 (4.5%)
3	12 (1.2%)
4	3 (0.3%)
5	1 (0.1%)
6	1 (0.1%)
8	1 (0.1%)
SELECT_n_of_non_aggr_func__ROUND	
0	938 (94%)
1	56 (5.6%)
2	5 (0.5%)
3	1 (0.1%)

Query parameter or value	Descriptive statistics
SELECT__n_of__non__aggr__func__YEAR	
0	875 (88%)
1	92 (9.2%)
2	24 (2.4%)
3	8 (0.8%)
4	1 (0.1%)
SELECT__n_of__non__aggr__func__DAY	
0	916 (92%)
1	65 (6.5%)
2	15 (1.5%)
3	3 (0.3%)
4	1 (0.1%)
SELECT__n_of__non__aggr__func__SUBSTR	
0	697 (70%)
1	224 (22%)
2	62 (6.2%)
3	15 (1.5%)
4	2 (0.2%)
SELECT__n_of__non__aggr__func__MONTH	
0	845 (85%)
1	119 (12%)
2	23 (2.3%)
3	7 (0.7%)
4	5 (0.5%)
7	1 (0.1%)
SELECT__n_of__non__aggr__func__RTRIM	
0	714 (71%)
1	218 (22%)
2	51 (5.1%)
3	14 (1.4%)
4	1 (0.1%)
5	1 (0.1%)
6	1 (0.1%)
SELECT__n_of__non__aggr__func__UPPER	
0	700 (70%)
1	232 (23%)
2	51 (5.1%)
3	10 (1.0%)
4	5 (0.5%)
6	2 (0.2%)
SELECT__n_of__non__aggr__func__LTRIM	
0	717 (72%)
1	213 (21%)
2	55 (5.5%)
3	12 (1.2%)
4	2 (0.2%)

Query parameter or value	Descriptive statistics
6	1 (0.1%)
SELECT_n_of_non_aggr_func___SQRT	
0	857 (86%)
1	118 (12%)
2	19 (1.9%)
3	4 (0.4%)
4	2 (0.2%)
SELECT_n_of_non_aggr_func___LOG	
0	908 (91%)
1	74 (7.4%)
2	12 (1.2%)
3	2 (0.2%)
4	2 (0.2%)
5	2 (0.2%)
SELECT_n_of_non_aggr_func___DOW	
0	893 (89%)
1	93 (9.3%)
2	11 (1.1%)
3	1 (0.1%)
4	2 (0.2%)
SELECT_n_of_non_aggr_func___ABS	
0	937 (94%)
1	58 (5.8%)
2	4 (0.4%)
3	1 (0.1%)
SELECT_n_of_non_aggr_func___TRUNC	
0	946 (95%)
1	52 (5.2%)
2	2 (0.2%)
SELECT_n_of_non_aggr_func___FLOOR	
0	940 (94%)
1	52 (5.2%)
2	8 (0.8%)
SELECT_n_of_all_non_aggr_func	[0.0, 2.0, 47.0] 3.1 / 4.1
SELECT_n_of_aggr_func___COUNT_DISTINCT	[0.00, 0.00, 10.00] 0.66 / 1.46
SELECT_n_of_aggr_func___MAX	
0	788 (79%)
1	81 (8.1%)
2	51 (5.1%)
3	24 (2.4%)
4	24 (2.4%)
5	20 (2.0%)
6	5 (0.5%)
7	4 (0.4%)
8	3 (0.3%)
SELECT_n_of_aggr_func___MIN	[0.00, 0.00, 9.00] 0.63 / 1.45

Query parameter or value	Descriptive statistics
SELECT_n_of_aggr_func__COUNT	[0.00, 0.00, 10.00] 0.60 / 1.38
SELECT_n_of_aggr_func__AVG	
0	940 (94%)
1	43 (4.3%)
2	14 (1.4%)
3	3 (0.3%)
SELECT_n_of_aggr_func__SUM	
0	944 (94%)
1	45 (4.5%)
2	8 (0.8%)
3	3 (0.3%)
SELECT_n_of_all_aggr_func	[0.00, 2.00, 11.00] 2.58 / 2.27
FROM_n_of_join_paths	
1	317 (32%)
2	337 (34%)
3	346 (35%)
FROM_n_of_super_joins__LEFT	
0	768 (77%)
1	204 (20%)
2	28 (2.8%)
FROM_n_of_super_joins__RIGHT	
0	746 (75%)
1	230 (23%)
2	24 (2.4%)
FROM_n_of_super_joins__FULL	
0	761 (76%)
1	218 (22%)
2	21 (2.1%)
FROM_n_of_joins__INNER	
0	238 (24%)
1	248 (25%)
2	236 (24%)
3	146 (15%)
4	70 (7.0%)
5	39 (3.9%)
6	15 (1.5%)
7	5 (0.5%)
8	3 (0.3%)
FROM_n_of_joins__RIGHT	
0	236 (24%)
1	267 (27%)
2	212 (21%)
3	145 (15%)
4	77 (7.7%)
5	44 (4.4%)
6	14 (1.4%)

Query parameter or value	Descriptive statistics
7	3 (0.3%)
8	2 (0.2%)
FROM_n_of_processed_rows	[5, 34,050,143, 114,749,772] 32,095,292 / 29,276,075
WHERE_n_of_predicates	[0.00, 2.50, 10.00] 2.89 / 2.28
WHERE_n_of_attribs_of_type__character_varying	
0	435 (44%)
1	310 (31%)
2	143 (14%)
3	82 (8.2%)
4	23 (2.3%)
5	7 (0.7%)
WHERE_n_of_attribs_of_type__integer	
0	444 (44%)
1	324 (32%)
2	156 (16%)
3	56 (5.6%)
4	17 (1.7%)
5	3 (0.3%)
WHERE_n_of_attribs_of_type__character	
0	710 (71%)
1	223 (22%)
2	52 (5.2%)
3	14 (1.4%)
4	1 (0.1%)
WHERE_n_of_attribs_of_type__numeric	
0	662 (66%)
1	246 (25%)
2	71 (7.1%)
3	17 (1.7%)
4	4 (0.4%)
WHERE_n_of_attribs_of_type__date	
0	825 (83%)
1	148 (15%)
2	24 (2.4%)
3	3 (0.3%)
WHERE_n_of_pkey_attribs	
0	608 (61%)
1	290 (29%)
2	84 (8.4%)
3	17 (1.7%)
4	1 (0.1%)
WHERE_n_of_connect_OR	
0	456 (46%)
1	165 (17%)
2	128 (13%)
3	109 (11%)

Query parameter or value	Descriptive statistics
4	59 (5.9%)
5	43 (4.3%)
6	25 (2.5%)
7	12 (1.2%)
8	3 (0.3%)
WHERE_n_of_operators___greater_or_less	
0	397 (40%)
1	314 (31%)
2	162 (16%)
3	77 (7.7%)
4	38 (3.8%)
5	12 (1.2%)
WHERE_n_of_operators___like	
0	818 (82%)
1	155 (16%)
2	25 (2.5%)
3	2 (0.2%)
WHERE_n_of_operators___in	
0	627 (63%)
1	262 (26%)
2	87 (8.7%)
3	21 (2.1%)
4	2 (0.2%)
5	1 (0.1%)
WHERE_n_of_operators___between	
0	604 (60%)
1	288 (29%)
2	84 (8.4%)
3	19 (1.9%)
4	5 (0.5%)
WHERE_n_of_non_aggr_func___ABS	
0	970 (97%)
1	27 (2.7%)
2	3 (0.3%)
WHERE_n_of_non_aggr_func___SQRT	
0	913 (91%)
1	83 (8.3%)
2	4 (0.4%)
WHERE_n_of_non_aggr_func___LOG	
0	943 (94%)
1	52 (5.2%)
2	4 (0.4%)
3	1 (0.1%)
WHERE_n_of_non_aggr_func___MONTH	
0	976 (98%)
1	24 (2.4%)

Query parameter or value	Descriptive statistics
WHERE_n_of_non_aggr_func__ROUND	
0	974 (97%)
1	26 (2.6%)
WHERE_n_of_non_aggr_func__DAY	
0	974 (97%)
1	26 (2.6%)
WHERE_n_of_non_aggr_func__YEAR	
0	967 (97%)
1	33 (3.3%)
WHERE_n_of_non_aggr_func__FLOOR	
0	972 (97%)
1	26 (2.6%)
2	1 (0.1%)
3	1 (0.1%)
WHERE_n_of_non_aggr_func__DOW	
0	978 (98%)
1	22 (2.2%)
WHERE_n_of_non_aggr_func__TRUNC	
0	968 (97%)
1	29 (2.9%)
2	3 (0.3%)
WHERE_n_of_all_non_aggr_func	
0	716 (72%)
1	206 (21%)
2	57 (5.7%)
3	20 (2.0%)
4	1 (0.1%)
GROUP_BY_n_of_columns	[0.00, 2.00, 12.00] 2.26 / 2.08
HAVING_n_of_main_predicates	[0.00, 4.00, 9.00] 3.34 / 2.64
HAVING_n_of_main_predicates__scalar_subquery	
0	438 (44%)
1	194 (19%)
2	160 (16%)
3	208 (21%)
HAVING_n_of_main_predicates__non_scalar_subquery	
0	445 (45%)
1	186 (19%)
2	182 (18%)
3	187 (19%)
HAVING_n_of_subqueries__scalar_subquery	[0.0, 1.0, 23.0] 2.4 / 3.7
HAVING_n_of_subqueries__non_scalar_subquery	
0	445 (45%)
1	186 (19%)
2	182 (18%)
3	187 (19%)

Query parameter or value	Descriptive statistics
HAVING_n_of_processed_rows_by_subqueries	[0, 20,251,690, 1,420,997,578] 106,363,821 / 192,779,616
ORDER_BY_n_of_columns	
0	302 (30%)
1	350 (35%)
2	253 (25%)
3	63 (6.3%)
4	18 (1.8%)
5	9 (0.9%)
6	3 (0.3%)
7	2 (0.2%)
limit	[1, 499, 1,000] 497 / 283
offset	[0, 0, 1,000] 248 / 328