

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

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

Scale factor: 1000 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, 101] 10 / 13
SELECT_n_of_non_aggr_func__LOWER	
0	699 (70%)
1	229 (23%)
2	56 (5.6%)
3	13 (1.3%)
4	3 (0.3%)
SELECT_n_of_non_aggr_func__UPPER	
0	671 (67%)
1	266 (27%)
2	37 (3.7%)
3	17 (1.7%)
4	4 (0.4%)
5	4 (0.4%)
6	1 (0.1%)

Query parameter or value	Descriptive statistics
SELECT__n_of__non__aggr__func__DOW	
0	871 (87%)
1	107 (11%)
2	18 (1.8%)
3	3 (0.3%)
4	1 (0.1%)
SELECT__n_of__non__aggr__func__MONTH	
0	857 (86%)
1	107 (11%)
2	22 (2.2%)
3	8 (0.8%)
4	3 (0.3%)
5	1 (0.1%)
6	1 (0.1%)
7	1 (0.1%)
SELECT__n_of__non__aggr__func__RTRIM	
0	670 (67%)
1	258 (26%)
2	47 (4.7%)
3	19 (1.9%)
4	4 (0.4%)
5	2 (0.2%)
SELECT__n_of__non__aggr__func__SUBSTR	
0	690 (69%)
1	233 (23%)
2	60 (6.0%)
3	12 (1.2%)
4	3 (0.3%)
5	1 (0.1%)
6	1 (0.1%)
SELECT__n_of__non__aggr__func__YEAR	
0	872 (87%)
1	102 (10%)
2	19 (1.9%)
3	4 (0.4%)
4	2 (0.2%)
5	1 (0.1%)
SELECT__n_of__non__aggr__func__LTRIM	
0	664 (66%)
1	259 (26%)
2	60 (6.0%)
3	14 (1.4%)
4	1 (0.1%)
5	2 (0.2%)
SELECT__n_of__non__aggr__func__ABS	
0	940 (94%)

Query parameter or value	Descriptive statistics
1	54 (5.4%)
2	6 (0.6%)
SELECT_n_of_non_aggr_func___SQRT	
0	835 (84%)
1	126 (13%)
2	28 (2.8%)
3	9 (0.9%)
4	2 (0.2%)
SELECT_n_of_non_aggr_func___DAY	
0	917 (92%)
1	69 (6.9%)
2	10 (1.0%)
3	2 (0.2%)
4	1 (0.1%)
5	1 (0.1%)
SELECT_n_of_non_aggr_func___LOG	
0	876 (88%)
1	104 (10%)
2	17 (1.7%)
3	3 (0.3%)
SELECT_n_of_non_aggr_func___TRUNC	
0	941 (94%)
1	55 (5.5%)
2	3 (0.3%)
3	1 (0.1%)
SELECT_n_of_non_aggr_func___FLOOR	
0	945 (95%)
1	48 (4.8%)
2	7 (0.7%)
SELECT_n_of_non_aggr_func___ROUND	
0	933 (93%)
1	65 (6.5%)
2	2 (0.2%)
SELECT_n_of_all_non_aggr_func	[0.0, 2.0, 34.0] 3.4 / 4.3
SELECT_n_of_aggr_func___MAX	[0.00, 0.00, 11.00] 0.61 / 1.36
SELECT_n_of_aggr_func___MIN	[0.00, 0.00, 9.00] 0.64 / 1.44
SELECT_n_of_aggr_func___SUM	
0	948 (95%)
1	34 (3.4%)
2	10 (1.0%)
3	7 (0.7%)
4	1 (0.1%)
SELECT_n_of_aggr_func___AVG	
0	951 (95%)
1	30 (3.0%)
2	16 (1.6%)

Query parameter or value	Descriptive statistics
3	2 (0.2%)
4	1 (0.1%)
SELECT_n_of_aggr_func__COUNT	[0.00, 0.00, 10.00] 0.63 / 1.49
SELECT_n_of_aggr_func__COUNT_DISTINCT	[0.00, 0.00, 10.00] 0.66 / 1.54
SELECT_n_of_all_aggr_func	[0.00, 2.00, 11.00] 2.70 / 2.33
FROM_n_of_join_paths	
1	312 (31%)
2	325 (33%)
3	363 (36%)
FROM_n_of_super_joins__RIGHT	
0	749 (75%)
1	235 (24%)
2	16 (1.6%)
FROM_n_of_super_joins__LEFT	
0	754 (75%)
1	225 (23%)
2	21 (2.1%)
FROM_n_of_super_joins__FULL	
0	778 (78%)
1	206 (21%)
2	16 (1.6%)
FROM_n_of_joins__INNER	
0	228 (23%)
1	269 (27%)
2	217 (22%)
3	145 (15%)
4	89 (8.9%)
5	36 (3.6%)
6	11 (1.1%)
7	5 (0.5%)
FROM_n_of_joins__RIGHT	
0	240 (24%)
1	236 (24%)
2	219 (22%)
3	156 (16%)
4	92 (9.2%)
5	36 (3.6%)
6	12 (1.2%)
7	9 (0.9%)
FROM_n_of_processed_rows	[5, 6,819,989,749, 22,299,969,187] 6,714,651,347 / 5,980,482,463
WHERE_n_of_predicates	[0.00, 2.00, 9.00] 2.63 / 2.17
WHERE_n_of_attribs_of_type__character	
0	740 (74%)
1	209 (21%)
2	41 (4.1%)

Query parameter or value	Descriptive statistics
3	8 (0.8%)
4	2 (0.2%)
WHERE_n_of_attribs_of_type__character_varying	
0	490 (49%)
1	298 (30%)
2	134 (13%)
3	54 (5.4%)
4	20 (2.0%)
5	2 (0.2%)
6	2 (0.2%)
WHERE_n_of_attribs_of_type__integer	
0	473 (47%)
1	303 (30%)
2	159 (16%)
3	55 (5.5%)
4	10 (1.0%)
WHERE_n_of_attribs_of_type__numeric	
0	630 (63%)
1	286 (29%)
2	65 (6.5%)
3	16 (1.6%)
4	3 (0.3%)
WHERE_n_of_attribs_of_type__date	
0	841 (84%)
1	145 (15%)
2	9 (0.9%)
3	5 (0.5%)
WHERE_n_of_pkey_attribs	
0	651 (65%)
1	256 (26%)
2	81 (8.1%)
3	11 (1.1%)
4	1 (0.1%)
WHERE_n_of_connect_OR	
0	488 (49%)
1	178 (18%)
2	124 (12%)
3	96 (9.6%)
4	52 (5.2%)
5	37 (3.7%)
6	20 (2.0%)
7	5 (0.5%)
WHERE_n_of_operators__in	
0	639 (64%)
1	267 (27%)
2	77 (7.7%)

Query parameter or value	Descriptive statistics
3	15 (1.5%)
4	2 (0.2%)
WHERE_n_of_operators__like	
0	845 (85%)
1	139 (14%)
2	14 (1.4%)
3	2 (0.2%)
WHERE_n_of_operators__between	
0	629 (63%)
1	275 (28%)
2	82 (8.2%)
3	13 (1.3%)
4	1 (0.1%)
WHERE_n_of_operators__greater_or_less	
0	437 (44%)
1	276 (28%)
2	158 (16%)
3	96 (9.6%)
4	25 (2.5%)
5	7 (0.7%)
6	1 (0.1%)
WHERE_n_of_non_aggr_func__ROUND	
0	978 (98%)
1	22 (2.2%)
WHERE_n_of_non_aggr_func__SQRT	
0	895 (90%)
1	98 (9.8%)
2	7 (0.7%)
WHERE_n_of_non_aggr_func__FLOOR	
0	976 (98%)
1	22 (2.2%)
2	2 (0.2%)
WHERE_n_of_non_aggr_func__LOG	
0	932 (93%)
1	64 (6.4%)
2	4 (0.4%)
WHERE_n_of_non_aggr_func__DAY	
0	977 (98%)
1	23 (2.3%)
WHERE_n_of_non_aggr_func__TRUNC	
0	974 (97%)
1	26 (2.6%)
WHERE_n_of_non_aggr_func__DOW	
0	972 (97%)
1	27 (2.7%)
2	1 (0.1%)

Query parameter or value	Descriptive statistics
WHERE_n_of_non_aggr_func__YEAR	
0	971 (97%)
1	29 (2.9%)
WHERE_n_of_non_aggr_func__ABS	
0	975 (98%)
1	24 (2.4%)
2	1 (0.1%)
WHERE_n_of_non_aggr_func__MONTH	
0	970 (97%)
1	30 (3.0%)
WHERE_n_of_all_non_aggr_func	
0	701 (70%)
1	221 (22%)
2	65 (6.5%)
3	10 (1.0%)
4	1 (0.1%)
5	2 (0.2%)
GROUP_BY_n_of_columns	[0.00, 2.00, 9.00] 2.28 / 2.08
HAVING_n_of_main_predicates	[0.00, 4.00, 9.00] 3.43 / 2.63
HAVING_n_of_main_predicates__scalar_subquery	
0	438 (44%)
1	182 (18%)
2	177 (18%)
3	203 (20%)
HAVING_n_of_main_predicates__non_scalar_subquery	
0	436 (44%)
1	194 (19%)
2	170 (17%)
3	200 (20%)
HAVING_n_of_subqueries__scalar_subquery	[0.0, 1.0, 20.0] 2.5 / 3.8
HAVING_n_of_subqueries__non_scalar_subquery	
0	436 (44%)
1	194 (19%)
2	170 (17%)
3	200 (20%)
HAVING_n_of_processed_rows_by_subqueries	[0, 10, 100,000,000, 395,279,445,186] 24,455,598,568 / 44,390,056,141
ORDER_BY_n_of_columns	
0	261 (26%)
1	379 (38%)
2	266 (27%)
3	76 (7.6%)
4	10 (1.0%)
5	7 (0.7%)
7	1 (0.1%)
limit	[1, 480, 1,000] 493 / 287

Query parameter or value	Descriptive statistics
offset	[0, 56, 996] 255 / 320