

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

## Scenario: 1-6jp\_ujpp\_\_g\_\_h0ss\_h0nss

## 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, 9, 172] 17 / 25
SELECT_n_of_non_aggr_func__SQRT	
0	789 (79%)
1	146 (15%)
2	36 (3.6%)
3	11 (1.1%)
4	7 (0.7%)
5	7 (0.7%)
6	2 (0.2%)
7	1 (0.1%)
9	1 (0.1%)
SELECT_n_of_non_aggr_func__SUBSTR	[0.00, 0.00, 9.00] 0.62 / 1.11
SELECT_n_of_non_aggr_func__DOW	
0	846 (85%)
1	111 (11%)

Query parameter or value	Descriptive statistics
2	21 (2.1%)
3	10 (1.0%)
4	4 (0.4%)
5	4 (0.4%)
6	1 (0.1%)
7	3 (0.3%)
SELECT_n_of_non_aggr_func__MONTH	
0	785 (79%)
1	151 (15%)
2	32 (3.2%)
3	11 (1.1%)
4	7 (0.7%)
5	3 (0.3%)
6	2 (0.2%)
7	5 (0.5%)
8	4 (0.4%)
SELECT_n_of_non_aggr_func__LOWER	[0.00, 0.00, 11.00] 0.67 / 1.12
SELECT_n_of_non_aggr_func__LOG	
0	858 (86%)
1	104 (10%)
2	18 (1.8%)
3	10 (1.0%)
4	8 (0.8%)
5	1 (0.1%)
6	1 (0.1%)
SELECT_n_of_non_aggr_func__LTRIM	
0	599 (60%)
1	287 (29%)
2	65 (6.5%)
3	24 (2.4%)
4	8 (0.8%)
5	7 (0.7%)
6	4 (0.4%)
7	4 (0.4%)
8	2 (0.2%)
SELECT_n_of_non_aggr_func__ROUND	
0	913 (91%)
1	66 (6.6%)
2	18 (1.8%)
3	3 (0.3%)
SELECT_n_of_non_aggr_func__RTRIM	[0.00, 0.00, 9.00] 0.58 / 1.05
SELECT_n_of_non_aggr_func__UPPER	[0.00, 0.00, 11.00] 0.65 / 1.18
SELECT_n_of_non_aggr_func__ABS	
0	913 (91%)
1	70 (7.0%)
2	15 (1.5%)

Query parameter or value	Descriptive statistics
3	2 (0.2%)
SELECT_n_of_non_aggr_func___FLOOR	
0	897 (90%)
1	91 (9.1%)
2	10 (1.0%)
3	2 (0.2%)
SELECT_n_of_non_aggr_func___YEAR	[0.00, 0.00, 9.00] 0.29 / 0.83
SELECT_n_of_non_aggr_func___TRUNC	
0	904 (90%)
1	83 (8.3%)
2	11 (1.1%)
3	2 (0.2%)
SELECT_n_of_non_aggr_func___DAY	
0	878 (88%)
1	96 (9.6%)
2	11 (1.1%)
3	10 (1.0%)
4	2 (0.2%)
5	2 (0.2%)
6	1 (0.1%)
SELECT_n_of_all_non_aggr_func	[0.0, 3.0, 79.0] 5.2 / 8.5
SELECT_n_of_aggr_func___COUNT	[0.00, 0.00, 12.00] 0.80 / 1.78
SELECT_n_of_aggr_func___MIN	[0.00, 0.00, 13.00] 0.78 / 1.87
SELECT_n_of_aggr_func___MAX	[0.00, 0.00, 12.00] 0.79 / 1.88
SELECT_n_of_aggr_func___COUNT_DISTINCT	[0.00, 0.00, 12.00] 0.84 / 1.94
SELECT_n_of_aggr_func___SUM	
0	928 (93%)
1	48 (4.8%)
2	17 (1.7%)
3	6 (0.6%)
4	1 (0.1%)
SELECT_n_of_aggr_func___AVG	
0	945 (95%)
1	36 (3.6%)
2	13 (1.3%)
3	6 (0.6%)
SELECT_n_of_all_aggr_func	[0.00, 3.00, 13.00] 3.39 / 3.05
FROM_n_of_join_paths	
1	176 (18%)
2	181 (18%)
3	150 (15%)
4	155 (16%)
5	167 (17%)
6	171 (17%)
FROM_n_of_super_joins___FULL	
0	536 (54%)

Query parameter or value	Descriptive statistics
1	308 (31%)
2	112 (11%)
3	35 (3.5%)
4	8 (0.8%)
5	1 (0.1%)
FROM_n_of_super_joins__RIGHT	
0	577 (58%)
1	291 (29%)
2	107 (11%)
3	18 (1.8%)
4	7 (0.7%)
FROM_n_of_super_joins__LEFT	
0	568 (57%)
1	305 (31%)
2	93 (9.3%)
3	26 (2.6%)
4	8 (0.8%)
FROM_n_of_joins__INNER	[0.00, 3.00, 13.00] 3.31 / 2.49
FROM_n_of_joins__RIGHT	[0.00, 3.00, 11.00] 3.30 / 2.53
FROM_n_of_processed_rows	[5, 9,300,661, 45,103,606] 11,831,188 / 9,695,664
WHERE_n_of_predicates	[0.00, 3.00, 13.00] 3.76 / 2.93
WHERE_n_of_attribs_of_type__character	
0	645 (65%)
1	245 (25%)
2	87 (8.7%)
3	17 (1.7%)
4	6 (0.6%)
WHERE_n_of_attribs_of_type__character_varying	
0	372 (37%)
1	276 (28%)
2	183 (18%)
3	109 (11%)
4	38 (3.8%)
5	16 (1.6%)
6	5 (0.5%)
7	1 (0.1%)
WHERE_n_of_attribs_of_type__integer	
0	371 (37%)
1	323 (32%)
2	172 (17%)
3	83 (8.3%)
4	33 (3.3%)
5	11 (1.1%)
6	4 (0.4%)
7	2 (0.2%)
8	1 (0.1%)

Query parameter or value	Descriptive statistics
WHERE_n_of_attribs_of_type__numeric	
0	571 (57%)
1	279 (28%)
2	105 (11%)
3	33 (3.3%)
4	10 (1.0%)
6	2 (0.2%)
WHERE_n_of_attribs_of_type__date	
0	798 (80%)
1	163 (16%)
2	39 (3.9%)
WHERE_n_of_pkey_attribs	
0	552 (55%)
1	288 (29%)
2	115 (12%)
3	37 (3.7%)
4	5 (0.5%)
5	1 (0.1%)
6	2 (0.2%)
WHERE_n_of_connect_OR	[0.00, 1.00, 11.00] 2.15 / 2.42
WHERE_n_of_operators__between	
0	520 (52%)
1	320 (32%)
2	113 (11%)
3	36 (3.6%)
4	9 (0.9%)
5	1 (0.1%)
6	1 (0.1%)
WHERE_n_of_operators__greater_or_less	
0	343 (34%)
1	263 (26%)
2	201 (20%)
3	105 (11%)
4	57 (5.7%)
5	15 (1.5%)
6	13 (1.3%)
7	3 (0.3%)
WHERE_n_of_operators__like	
0	804 (80%)
1	166 (17%)
2	24 (2.4%)
3	6 (0.6%)
WHERE_n_of_operators__in	
0	526 (53%)
1	286 (29%)
2	130 (13%)

Query parameter or value	Descriptive statistics
3	41 (4.1%)
4	14 (1.4%)
5	2 (0.2%)
6	1 (0.1%)
WHERE_n_of_non_aggr_func__SQRT	
0	881 (88%)
1	112 (11%)
2	7 (0.7%)
WHERE_n_of_non_aggr_func__LOG	
0	929 (93%)
1	67 (6.7%)
2	4 (0.4%)
WHERE_n_of_non_aggr_func__TRUNC	
0	955 (96%)
1	44 (4.4%)
2	1 (0.1%)
WHERE_n_of_non_aggr_func__DOW	
0	968 (97%)
1	31 (3.1%)
2	1 (0.1%)
WHERE_n_of_non_aggr_func__FLOOR	
0	962 (96%)
1	37 (3.7%)
2	1 (0.1%)
WHERE_n_of_non_aggr_func__MONTH	
0	968 (97%)
1	32 (3.2%)
WHERE_n_of_non_aggr_func__YEAR	
0	971 (97%)
1	27 (2.7%)
2	2 (0.2%)
WHERE_n_of_non_aggr_func__ROUND	
0	961 (96%)
1	37 (3.7%)
2	2 (0.2%)
WHERE_n_of_non_aggr_func__ABS	
0	949 (95%)
1	51 (5.1%)
WHERE_n_of_non_aggr_func__DAY	
0	960 (96%)
1	40 (4.0%)
WHERE_n_of_all_non_aggr_func	
0	634 (63%)
1	242 (24%)
2	104 (10%)
3	16 (1.6%)

Query parameter or value	Descriptive statistics
4	4 (0.4%)
GROUP_BY_n_of_columns	[0.00, 2.00, 11.00] 2.94 / 2.83
HAVING_n_of_main_predicates	
0	466 (47%)
1	180 (18%)
2	177 (18%)
3	177 (18%)
ORDER_BY_n_of_columns	
0	293 (29%)
1	321 (32%)
2	235 (24%)
3	106 (11%)
4	23 (2.3%)
5	16 (1.6%)
6	5 (0.5%)
7	1 (0.1%)
limit	[4, 514, 999] 508 / 286
offset	[0, 16, 999] 247 / 315