

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

## Scenario: 1-6jp\_ujpp\_\_g\_\_h0-3ss\_h0-3nss

## Scale factor: 0.01 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, 8, 178] 16 / 25
SELECT_n_of_non_aggr_func__LTRIM	[0.00, 0.00, 9.00] 0.59 / 1.07
SELECT_n_of_non_aggr_func__SUBSTR	
0	639 (64%)
1	246 (25%)
2	70 (7.0%)
3	26 (2.6%)
4	11 (1.1%)
5	5 (0.5%)
6	3 (0.3%)
SELECT_n_of_non_aggr_func__LOWER	[0.00, 0.00, 10.00] 0.60 / 1.00
SELECT_n_of_non_aggr_func__UPPER	
0	615 (62%)
1	251 (25%)
2	94 (9.4%)

Query parameter or value	Descriptive statistics
3	26 (2.6%)
4	8 (0.8%)
5	1 (0.1%)
6	3 (0.3%)
7	1 (0.1%)
9	1 (0.1%)
SELECT_n_of_non_aggr_func___ABS	
0	934 (93%)
1	58 (5.8%)
2	6 (0.6%)
3	2 (0.2%)
SELECT_n_of_non_aggr_func___ROUND	
0	924 (92%)
1	60 (6.0%)
2	14 (1.4%)
3	2 (0.2%)
SELECT_n_of_non_aggr_func___RTRIM	[0.00, 0.00, 9.00] 0.65 / 1.09
SELECT_n_of_non_aggr_func___SQRT	
0	815 (82%)
1	123 (12%)
2	33 (3.3%)
3	12 (1.2%)
4	10 (1.0%)
5	4 (0.4%)
6	3 (0.3%)
SELECT_n_of_non_aggr_func___DAY	
0	886 (89%)
1	84 (8.4%)
2	18 (1.8%)
3	8 (0.8%)
4	4 (0.4%)
SELECT_n_of_non_aggr_func___LOG	
0	864 (86%)
1	92 (9.2%)
2	24 (2.4%)
3	9 (0.9%)
4	10 (1.0%)
5	1 (0.1%)
SELECT_n_of_non_aggr_func___MONTH	
0	802 (80%)
1	135 (14%)
2	34 (3.4%)
3	14 (1.4%)
4	3 (0.3%)
5	7 (0.7%)
6	2 (0.2%)

Query parameter or value	Descriptive statistics
7	3 (0.3%)
SELECT_n_of_non_aggr_func___TRUNC	
0	917 (92%)
1	75 (7.5%)
2	7 (0.7%)
3	1 (0.1%)
SELECT_n_of_non_aggr_func___DOW	
0	846 (85%)
1	115 (12%)
2	28 (2.8%)
3	5 (0.5%)
4	2 (0.2%)
5	1 (0.1%)
6	2 (0.2%)
7	1 (0.1%)
SELECT_n_of_non_aggr_func___FLOOR	
0	925 (93%)
1	64 (6.4%)
2	8 (0.8%)
3	2 (0.2%)
6	1 (0.1%)
SELECT_n_of_non_aggr_func___YEAR	
0	813 (81%)
1	134 (13%)
2	27 (2.7%)
3	14 (1.4%)
4	6 (0.6%)
5	3 (0.3%)
6	2 (0.2%)
8	1 (0.1%)
SELECT_n_of_all_non_aggr_func	[0.0, 3.0, 67.0] 4.8 / 7.4
SELECT_n_of_aggr_func___COUNT_DISTINCT	[0.00, 0.00, 14.00] 0.82 / 1.99
SELECT_n_of_aggr_func___MAX	[0.00, 0.00, 13.00] 0.84 / 1.97
SELECT_n_of_aggr_func___COUNT	[0.00, 0.00, 15.00] 0.78 / 1.88
SELECT_n_of_aggr_func___SUM	
0	932 (93%)
1	46 (4.6%)
2	18 (1.8%)
3	4 (0.4%)
SELECT_n_of_aggr_func___MIN	[0.00, 0.00, 14.00] 0.82 / 1.92
SELECT_n_of_aggr_func___AVG	
0	937 (94%)
1	40 (4.0%)
2	13 (1.3%)
3	8 (0.8%)
4	1 (0.1%)

Query parameter or value	Descriptive statistics
5	1 (0.1%)
SELECT_n_of_all_aggr_func	[0.0, 3.0, 15.0] 3.4 / 3.2
FROM_n_of_join_paths	
1	179 (18%)
2	173 (17%)
3	143 (14%)
4	192 (19%)
5	169 (17%)
6	144 (14%)
FROM_n_of_super_joins___FULL	
0	549 (55%)
1	302 (30%)
2	121 (12%)
3	26 (2.6%)
4	2 (0.2%)
FROM_n_of_super_joins___LEFT	
0	584 (58%)
1	290 (29%)
2	94 (9.4%)
3	26 (2.6%)
4	6 (0.6%)
FROM_n_of_super_joins___RIGHT	
0	556 (56%)
1	299 (30%)
2	114 (11%)
3	28 (2.8%)
4	2 (0.2%)
5	1 (0.1%)
FROM_n_of_joins___INNER	[0.00, 3.00, 12.00] 3.37 / 2.55
FROM_n_of_joins___RIGHT	[0.00, 3.00, 14.00] 3.19 / 2.42
FROM_n_of_processed_rows	[5, 93,228, 428,705] 117,309 / 95,842
WHERE_n_of_predicates	[0.00, 3.00, 13.00] 3.82 / 2.90
WHERE_n_of_attribs_of_type___character	
0	654 (65%)
1	250 (25%)
2	72 (7.2%)
3	22 (2.2%)
4	2 (0.2%)
WHERE_n_of_attribs_of_type___character_varying	
0	368 (37%)
1	292 (29%)
2	191 (19%)
3	94 (9.4%)
4	36 (3.6%)
5	14 (1.4%)
6	4 (0.4%)

Query parameter or value	Descriptive statistics
7	1 (0.1%)
WHERE_n_of_attribs_of_type__integer	
0	366 (37%)
1	303 (30%)
2	170 (17%)
3	111 (11%)
4	33 (3.3%)
5	13 (1.3%)
6	3 (0.3%)
7	1 (0.1%)
WHERE_n_of_attribs_of_type__numeric	
0	566 (57%)
1	280 (28%)
2	100 (10%)
3	41 (4.1%)
4	11 (1.1%)
5	2 (0.2%)
WHERE_n_of_attribs_of_type__date	
0	767 (77%)
1	187 (19%)
2	35 (3.5%)
3	10 (1.0%)
4	1 (0.1%)
WHERE_n_of_pkey_attribs	
0	530 (53%)
1	308 (31%)
2	116 (12%)
3	35 (3.5%)
4	8 (0.8%)
5	2 (0.2%)
7	1 (0.1%)
WHERE_n_of_connect_OR	[0.00, 1.00, 11.00] 2.19 / 2.37
WHERE_n_of_operators__between	
0	520 (52%)
1	285 (29%)
2	130 (13%)
3	49 (4.9%)
4	14 (1.4%)
5	2 (0.2%)
WHERE_n_of_operators__in	
0	532 (53%)
1	298 (30%)
2	116 (12%)
3	40 (4.0%)
4	13 (1.3%)
5	1 (0.1%)

Query parameter or value	Descriptive statistics
WHERE_n_of_operators___greater_or_less	
0	335 (34%)
1	271 (27%)
2	179 (18%)
3	115 (12%)
4	58 (5.8%)
5	25 (2.5%)
6	11 (1.1%)
7	5 (0.5%)
8	1 (0.1%)
WHERE_n_of_operators___like	
0	801 (80%)
1	173 (17%)
2	25 (2.5%)
3	1 (0.1%)
WHERE_n_of_non_aggr_func___LOG	
0	925 (93%)
1	72 (7.2%)
2	3 (0.3%)
WHERE_n_of_non_aggr_func___SQRT	
0	895 (90%)
1	96 (9.6%)
2	9 (0.9%)
WHERE_n_of_non_aggr_func___FLOOR	
0	955 (96%)
1	44 (4.4%)
2	1 (0.1%)
WHERE_n_of_non_aggr_func___YEAR	
0	971 (97%)
1	28 (2.8%)
2	1 (0.1%)
WHERE_n_of_non_aggr_func___ABS	
0	958 (96%)
1	41 (4.1%)
2	1 (0.1%)
WHERE_n_of_non_aggr_func___DOW	
0	961 (96%)
1	39 (3.9%)
WHERE_n_of_non_aggr_func___ROUND	
0	965 (97%)
1	35 (3.5%)
WHERE_n_of_non_aggr_func___MONTH	
0	955 (96%)
1	45 (4.5%)
WHERE_n_of_non_aggr_func___DAY	
0	948 (95%)

Query parameter or value	Descriptive statistics
1	51 (5.1%)
2	1 (0.1%)
WHERE_n_of_non_aggr_func__TRUNC	
0	951 (95%)
1	46 (4.6%)
2	2 (0.2%)
3	1 (0.1%)
WHERE_n_of_all_non_aggr_func	
0	601 (60%)
1	298 (30%)
2	75 (7.5%)
3	16 (1.6%)
4	10 (1.0%)
GROUP_BY_n_of_columns	[0.00, 2.00, 12.00] 2.96 / 2.85
HAVING_n_of_main_predicates	[0.00, 3.00, 9.00] 3.27 / 2.63
HAVING_n_of_main_predicates__scalar_subquery	
0	471 (47%)
1	183 (18%)
2	174 (17%)
3	172 (17%)
HAVING_n_of_main_predicates__non_scalar_subquery	
0	455 (46%)
1	167 (17%)
2	194 (19%)
3	184 (18%)
HAVING_n_of_subqueries__scalar_subquery	[0.0, 1.0, 20.0] 2.2 / 3.4
HAVING_n_of_subqueries__non_scalar_subquery	
0	455 (46%)
1	167 (17%)
2	194 (19%)
3	184 (18%)
HAVING_n_of_processed_rows_by_subqueries	[0, 109,830, 5,347,650] 383,294 / 652,302
ORDER_BY_n_of_columns	
0	283 (28%)
1	353 (35%)
2	231 (23%)
3	94 (9.4%)
4	20 (2.0%)
5	11 (1.1%)
6	5 (0.5%)
7	2 (0.2%)
9	1 (0.1%)
limit	[1, 555, 999] 525 / 280
offset	[0, 10, 999] 253 / 324