

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

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## Scenario: 1-6jp_rjpp__g__h0-3ss_h0nss

## Scale factor: 1 GB

## The 1000-query pack was generated on: 2023-11-07

## 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, 137] 15 / 22
SELECT_n_of_non_aggr_func__ABS	
0	928 (93%)
1	66 (6.6%)
2	6 (0.6%)
SELECT_n_of_non_aggr_func__LOWER	
0	627 (63%)
1	245 (25%)
2	81 (8.1%)
3	31 (3.1%)
4	3 (0.3%)
5	8 (0.8%)
7	3 (0.3%)
8	2 (0.2%)
SELECT_n_of_non_aggr_func__LTRIM	

Query parameter or value	Descriptive statistics
0	630 (63%)
1	254 (25%)
2	74 (7.4%)
3	19 (1.9%)
4	15 (1.5%)
5	5 (0.5%)
6	2 (0.2%)
7	1 (0.1%)
SELECT__n_of__non_aggr_func__RTRIM	
0	622 (62%)
1	248 (25%)
11	1 (0.1%)
2	88 (8.8%)
3	25 (2.5%)
4	11 (1.1%)
5	3 (0.3%)
7	1 (0.1%)
8	1 (0.1%)
SELECT__n_of__non_aggr_func__SUBSTR	[0.00, 0.00, 9.00] 0.54 / 0.97
SELECT__n_of__non_aggr_func__SQRT	
0	795 (80%)
1	147 (15%)
2	34 (3.4%)
3	14 (1.4%)
4	6 (0.6%)
5	3 (0.3%)
6	1 (0.1%)
SELECT__n_of__non_aggr_func__UPPER	
0	649 (65%)
1	247 (25%)
2	65 (6.5%)
3	22 (2.2%)
4	13 (1.3%)
5	3 (0.3%)
8	1 (0.1%)
SELECT__n_of__non_aggr_func__LOG	
0	863 (86%)
1	99 (9.9%)
2	26 (2.6%)
3	5 (0.5%)
4	2 (0.2%)
5	3 (0.3%)
6	1 (0.1%)
7	1 (0.1%)
SELECT__n_of__non_aggr_func__MONTH	
0	828 (83%)

Query parameter or value	Descriptive statistics
1	127 (13%)
2	25 (2.5%)
3	9 (0.9%)
4	7 (0.7%)
5	3 (0.3%)
6	1 (0.1%)
SELECT_n_of_non_aggr_func__YEAR	
0	856 (86%)
1	108 (11%)
2	16 (1.6%)
3	11 (1.1%)
4	5 (0.5%)
5	3 (0.3%)
6	1 (0.1%)
SELECT_n_of_non_aggr_func__DAY	
0	891 (89%)
1	89 (8.9%)
2	14 (1.4%)
3	4 (0.4%)
4	2 (0.2%)
SELECT_n_of_non_aggr_func__DOW	
0	856 (86%)
1	108 (11%)
2	25 (2.5%)
3	7 (0.7%)
4	2 (0.2%)
6	1 (0.1%)
7	1 (0.1%)
SELECT_n_of_non_aggr_func__TRUNC	
0	923 (92%)
1	60 (6.0%)
2	16 (1.6%)
3	1 (0.1%)
SELECT_n_of_non_aggr_func__FLOOR	
0	908 (91%)
1	79 (7.9%)
2	12 (1.2%)
3	1 (0.1%)
SELECT_n_of_non_aggr_func__ROUND	
0	934 (93%)
1	53 (5.3%)
2	8 (0.8%)
3	5 (0.5%)
SELECT_n_of_all_non_aggr_func	[0.0, 3.0, 53.0] 4.5 / 6.6
SELECT_n_of_aggr_func__COUNT_DISTINCT	[0.00, 0.00, 13.00] 0.91 / 2.00
SELECT_n_of_aggr_func__MIN	[0.00, 0.00, 11.00] 0.90 / 1.97

Query parameter or value	Descriptive statistics
SELECT_n_of_aggr_func__MAX	[0.00, 0.00, 11.00] 0.88 / 1.87
SELECT_n_of_aggr_func__SUM	
0	933 (93%)
1	43 (4.3%)
2	15 (1.5%)
3	6 (0.6%)
4	3 (0.3%)
SELECT_n_of_aggr_func__AVG	
0	946 (95%)
1	35 (3.5%)
2	13 (1.3%)
3	5 (0.5%)
4	1 (0.1%)
SELECT_n_of_aggr_func__COUNT	[0.00, 0.00, 15.00] 0.74 / 1.82
SELECT_n_of_all_aggr_func	[0.0, 3.0, 17.0] 3.6 / 3.1
FROM_n_of_join_paths	
1	183 (18%)
2	152 (15%)
3	163 (16%)
4	175 (18%)
5	160 (16%)
6	167 (17%)
FROM_n_of_super_joins__FULL	
0	548 (55%)
1	318 (32%)
2	104 (10%)
3	28 (2.8%)
4	2 (0.2%)
FROM_n_of_super_joins__RIGHT	
0	554 (55%)
1	309 (31%)
2	109 (11%)
3	25 (2.5%)
4	3 (0.3%)
FROM_n_of_super_joins__LEFT	
0	541 (54%)
1	312 (31%)
2	132 (13%)
3	13 (1.3%)
4	2 (0.2%)
FROM_n_of_joins__INNER	[0.00, 3.00, 12.00] 3.26 / 2.48
FROM_n_of_joins__RIGHT	[0.00, 3.00, 13.00] 3.26 / 2.46
FROM_n_of_processed_rows	[5, 9,240,649, 42,563,666] 11,463,959 / 9,719,894
WHERE_n_of_predicates	[0.00, 3.00, 13.00] 3.72 / 2.96
WHERE_n_of_attribs_of_type__character_varying	
0	387 (39%)

Query parameter or value	Descriptive statistics
1	281 (28%)
2	170 (17%)
3	106 (11%)
4	34 (3.4%)
5	16 (1.6%)
6	6 (0.6%)
WHERE_n_of_attribs_of_type__integer	
0	360 (36%)
1	298 (30%)
2	181 (18%)
3	102 (10%)
4	45 (4.5%)
5	8 (0.8%)
6	6 (0.6%)
WHERE_n_of_attribs_of_type__numeric	
0	610 (61%)
1	246 (25%)
2	99 (9.9%)
3	32 (3.2%)
4	11 (1.1%)
5	2 (0.2%)
WHERE_n_of_attribs_of_type__character	
0	657 (66%)
1	229 (23%)
2	94 (9.4%)
3	18 (1.8%)
4	2 (0.2%)
WHERE_n_of_attribs_of_type__date	
0	814 (81%)
1	148 (15%)
2	31 (3.1%)
3	7 (0.7%)
WHERE_n_of_pkey_attribs	
0	517 (52%)
1	311 (31%)
2	124 (12%)
3	37 (3.7%)
4	9 (0.9%)
5	2 (0.2%)
WHERE_n_of_connect_OR	[0.00, 1.00, 11.00] 2.11 / 2.39
WHERE_n_of_operators__greater_or_less	[0.00, 1.00, 9.00] 1.45 / 1.52
WHERE_n_of_operators__in	
0	534 (53%)
1	304 (30%)
2	100 (10%)
3	49 (4.9%)

Query parameter or value	Descriptive statistics
4	11 (1.1%)
5	2 (0.2%)
WHERE_n_of_operators_between	
0	557 (56%)
1	276 (28%)
2	123 (12%)
3	33 (3.3%)
4	9 (0.9%)
5	2 (0.2%)
WHERE_n_of_operators_like	
0	789 (79%)
1	184 (18%)
2	24 (2.4%)
3	3 (0.3%)
WHERE_n_of_non_aggr_func_ROUND	
0	952 (95%)
1	44 (4.4%)
2	4 (0.4%)
WHERE_n_of_non_aggr_func_SQRT	
0	894 (89%)
1	98 (9.8%)
2	7 (0.7%)
3	1 (0.1%)
WHERE_n_of_non_aggr_func_TRUNC	
0	965 (97%)
1	35 (3.5%)
WHERE_n_of_non_aggr_func_ABS	
0	972 (97%)
1	28 (2.8%)
WHERE_n_of_non_aggr_func_LOG	
0	922 (92%)
1	73 (7.3%)
2	4 (0.4%)
3	1 (0.1%)
WHERE_n_of_non_aggr_func_DOW	
0	972 (97%)
1	28 (2.8%)
WHERE_n_of_non_aggr_func_YEAR	
0	964 (96%)
1	36 (3.6%)
WHERE_n_of_non_aggr_func_FLOOR	
0	957 (96%)
1	41 (4.1%)
2	2 (0.2%)
WHERE_n_of_non_aggr_func_MONTH	
0	971 (97%)

Query parameter or value	Descriptive statistics
1	28 (2.8%)
2	1 (0.1%)
WHERE_n_of_non_aggr_func__DAY	
0	968 (97%)
1	30 (3.0%)
2	2 (0.2%)
WHERE_n_of_all_non_aggr_func	
0	653 (65%)
1	251 (25%)
2	60 (6.0%)
3	29 (2.9%)
4	6 (0.6%)
5	1 (0.1%)
GROUP_BY_n_of_columns	[0.00, 2.00, 12.00] 3.03 / 2.82
HAVING_n_of_main_predicates	
0	283 (28%)
1	100 (10%)
2	145 (15%)
3	167 (17%)
4	155 (16%)
5	103 (10%)
6	47 (4.7%)
HAVING_n_of_main_predicates__scalar_subquery	
0	420 (42%)
1	191 (19%)
2	203 (20%)
3	186 (19%)
HAVING_n_of_subqueries__scalar_subquery	[0.0, 1.0, 24.0] 2.4 / 3.6
HAVING_n_of_processed_rows_by_subqueries	[0, 1,800,040, 835,470,920] 28,394,367 / 60,641,258
ORDER_BY_n_of_columns	
0	312 (31%)
1	325 (33%)
2	233 (23%)
3	97 (9.7%)
4	17 (1.7%)
5	8 (0.8%)
6	4 (0.4%)
7	3 (0.3%)
8	1 (0.1%)
limit	[1, 491, 995] 503 / 283
offset	[0, 0, 997] 247 / 327