

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

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## Scenario: 1-3jp_rjpp__g__h0-3ss_h0nss

## Scale factor: 10 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, 7, 91] 10 / 12
SELECT_n_of_non_aggr_func__FLOOR	
0	937 (94%)
1	57 (5.7%)
2	6 (0.6%)
SELECT_n_of_non_aggr_func__LOWER	
0	700 (70%)
1	221 (22%)
2	60 (6.0%)
3	17 (1.7%)
4	1 (0.1%)
5	1 (0.1%)
SELECT_n_of_non_aggr_func__SUBSTR	
0	686 (69%)
1	249 (25%)

Query parameter or value	Descriptive statistics
2	47 (4.7%)
3	12 (1.2%)
4	5 (0.5%)
6	1 (0.1%)
SELECT_n_of_non_aggr_func__RTRIM	
0	693 (69%)
1	222 (22%)
2	69 (6.9%)
3	12 (1.2%)
4	1 (0.1%)
5	2 (0.2%)
7	1 (0.1%)
SELECT_n_of_non_aggr_func__LTRIM	
0	698 (70%)
1	236 (24%)
2	50 (5.0%)
3	10 (1.0%)
4	5 (0.5%)
5	1 (0.1%)
SELECT_n_of_non_aggr_func__ABS	
0	944 (94%)
1	51 (5.1%)
2	4 (0.4%)
3	1 (0.1%)
SELECT_n_of_non_aggr_func__LOG	
0	907 (91%)
1	81 (8.1%)
2	10 (1.0%)
3	2 (0.2%)
SELECT_n_of_non_aggr_func__TRUNC	
0	944 (94%)
1	50 (5.0%)
2	6 (0.6%)
SELECT_n_of_non_aggr_func__UPPER	
0	717 (72%)
1	219 (22%)
2	47 (4.7%)
3	9 (0.9%)
4	7 (0.7%)
5	1 (0.1%)
SELECT_n_of_non_aggr_func__YEAR	
0	879 (88%)
1	95 (9.5%)
2	19 (1.9%)
3	4 (0.4%)
4	2 (0.2%)

Query parameter or value	Descriptive statistics
5	1 (0.1%)
SELECT_n_of_non_aggr_func__MONTH	
0	854 (85%)
1	113 (11%)
2	23 (2.3%)
3	6 (0.6%)
4	4 (0.4%)
SELECT_n_of_non_aggr_func__DOW	
0	900 (90%)
1	74 (7.4%)
2	20 (2.0%)
3	5 (0.5%)
4	1 (0.1%)
SELECT_n_of_non_aggr_func__ROUND	
0	950 (95%)
1	45 (4.5%)
2	5 (0.5%)
SELECT_n_of_non_aggr_func__DAY	
0	924 (92%)
1	67 (6.7%)
2	5 (0.5%)
3	4 (0.4%)
SELECT_n_of_non_aggr_func__SQRT	
0	862 (86%)
1	110 (11%)
2	13 (1.3%)
3	12 (1.2%)
4	2 (0.2%)
5	1 (0.1%)
SELECT_n_of_all_non_aggr_func	[0.0, 2.0, 40.0] 3.1 / 3.9
SELECT_n_of_aggr_func__COUNT_DISTINCT	[0.00, 0.00, 9.00] 0.58 / 1.31
SELECT_n_of_aggr_func__SUM	
0	936 (94%)
1	47 (4.7%)
2	14 (1.4%)
3	3 (0.3%)
SELECT_n_of_aggr_func__MIN	[0.00, 0.00, 10.00] 0.64 / 1.45
SELECT_n_of_aggr_func__COUNT	[0.00, 0.00, 9.00] 0.67 / 1.45
SELECT_n_of_aggr_func__MAX	[0.00, 0.00, 11.00] 0.62 / 1.42
SELECT_n_of_aggr_func__AVG	
0	941 (94%)
1	46 (4.6%)
2	10 (1.0%)
3	3 (0.3%)
SELECT_n_of_all_aggr_func	[0.00, 2.00, 11.00] 2.66 / 2.17
FROM_n_of_join_paths	

Query parameter or value	Descriptive statistics
1	324 (32%)
2	339 (34%)
3	337 (34%)
FROM_n_of_super_joins___FULL	
0	782 (78%)
1	194 (19%)
2	24 (2.4%)
FROM_n_of_super_joins___RIGHT	
0	762 (76%)
1	218 (22%)
2	20 (2.0%)
FROM_n_of_super_joins___LEFT	
0	764 (76%)
1	216 (22%)
2	20 (2.0%)
FROM_n_of_joins___INNER	
0	244 (24%)
1	264 (26%)
2	202 (20%)
3	149 (15%)
4	82 (8.2%)
5	40 (4.0%)
6	14 (1.4%)
7	5 (0.5%)
FROM_n_of_joins___RIGHT	
0	219 (22%)
1	291 (29%)
2	189 (19%)
3	156 (16%)
4	92 (9.2%)
5	39 (3.9%)
6	10 (1.0%)
7	3 (0.3%)
8	1 (0.1%)
FROM_n_of_processed_rows	[5, 68,079,151, 229,441,539] 64,897,395 / 60,486,688
WHERE_n_of_predicates	[0.00, 3.00, 10.00] 2.84 / 2.18
WHERE_n_of_attris_of_type___character_varying	
0	423 (42%)
1	319 (32%)
2	173 (17%)
3	72 (7.2%)
4	10 (1.0%)
5	2 (0.2%)
6	1 (0.1%)
WHERE_n_of_attris_of_type___character	
0	737 (74%)

Query parameter or value	Descriptive statistics
1	203 (20%)
2	50 (5.0%)
3	9 (0.9%)
4	1 (0.1%)
WHERE_n_of_attribs_of_type__integer	
0	442 (44%)
1	312 (31%)
2	163 (16%)
3	60 (6.0%)
4	19 (1.9%)
5	4 (0.4%)
WHERE_n_of_attribs_of_type__numeric	
0	652 (65%)
1	249 (25%)
2	77 (7.7%)
3	21 (2.1%)
4	1 (0.1%)
WHERE_n_of_attribs_of_type__date	
0	839 (84%)
1	142 (14%)
2	16 (1.6%)
3	3 (0.3%)
WHERE_n_of_pkey_attribs	
0	615 (62%)
1	284 (28%)
2	83 (8.3%)
3	16 (1.6%)
4	2 (0.2%)
WHERE_n_of_connect_OR	[0.00, 1.00, 9.00] 1.36 / 1.68
WHERE_n_of_operators__greater_or_less	
0	389 (39%)
1	298 (30%)
2	193 (19%)
3	78 (7.8%)
4	32 (3.2%)
5	8 (0.8%)
6	2 (0.2%)
WHERE_n_of_operators__between	
0	599 (60%)
1	294 (29%)
2	84 (8.4%)
3	18 (1.8%)
4	4 (0.4%)
5	1 (0.1%)
WHERE_n_of_operators__in	
0	636 (64%)

Query parameter or value	Descriptive statistics
1	259 (26%)
2	79 (7.9%)
3	24 (2.4%)
4	2 (0.2%)
WHERE_n_of_operators__like	
0	841 (84%)
1	143 (14%)
2	13 (1.3%)
3	3 (0.3%)
WHERE_n_of_non_aggr_func__TRUNC	
0	972 (97%)
1	28 (2.8%)
WHERE_n_of_non_aggr_func__SQRT	
0	912 (91%)
1	84 (8.4%)
2	3 (0.3%)
3	1 (0.1%)
WHERE_n_of_non_aggr_func__ABS	
0	971 (97%)
1	29 (2.9%)
WHERE_n_of_non_aggr_func__DAY	
0	975 (98%)
1	25 (2.5%)
WHERE_n_of_non_aggr_func__DOW	
0	977 (98%)
1	22 (2.2%)
2	1 (0.1%)
WHERE_n_of_non_aggr_func__MONTH	
0	971 (97%)
1	29 (2.9%)
WHERE_n_of_non_aggr_func__LOG	
0	949 (95%)
1	46 (4.6%)
2	4 (0.4%)
3	1 (0.1%)
WHERE_n_of_non_aggr_func__YEAR	
0	977 (98%)
1	23 (2.3%)
WHERE_n_of_non_aggr_func__ROUND	
0	966 (97%)
1	34 (3.4%)
WHERE_n_of_non_aggr_func__FLOOR	
0	977 (98%)
1	23 (2.3%)
WHERE_n_of_all_non_aggr_func	
0	719 (72%)

Query parameter or value	Descriptive statistics
1	214 (21%)
2	52 (5.2%)
3	13 (1.3%)
4	2 (0.2%)
GROUP_BY_n_of_columns	[0.00, 2.00, 9.00] 2.44 / 2.17
HAVING_n_of_main_predicates	
0	287 (29%)
1	91 (9.1%)
2	153 (15%)
3	186 (19%)
4	157 (16%)
5	85 (8.5%)
6	41 (4.1%)
HAVING_n_of_main_predicates__scalar_subquery	
0	450 (45%)
1	173 (17%)
2	177 (18%)
3	200 (20%)
HAVING_n_of_subqueries__scalar_subquery	[0.0, 1.0, 27.0] 2.4 / 3.6
HAVING_n_of_processed_rows_by_subqueries	[1,900,338, 3,913,916,031] 147,505,392 / 325,285,514
ORDER_BY_n_of_columns	
0	313 (31%)
1	378 (38%)
2	220 (22%)
3	72 (7.2%)
4	10 (1.0%)
5	6 (0.6%)
6	1 (0.1%)
limit	[1, 484, 999] 495 / 290
offset	[0, 15, 999] 254 / 320