

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: 1000 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, 166] 16 / 24
SELECT_n_of_non_aggr_func__TRUNC	
0	890 (89%)
1	94 (9.4%)
2	12 (1.2%)
3	4 (0.4%)
SELECT_n_of_non_aggr_func__DAY	
0	885 (89%)
1	79 (7.9%)
2	20 (2.0%)
3	9 (0.9%)
4	3 (0.3%)
5	3 (0.3%)
7	1 (0.1%)
SELECT_n_of_non_aggr_func__LOWER	[0.00, 0.00, 12.00] 0.64 / 1.14

Query parameter or value	Descriptive statistics
SELECT__n_of__non_aggr_func__LTRIM	
0	624 (62%)
1	246 (25%)
2	72 (7.2%)
3	28 (2.8%)
4	15 (1.5%)
5	7 (0.7%)
6	4 (0.4%)
7	3 (0.3%)
8	1 (0.1%)
SELECT__n_of__non_aggr_func__MONTH	[0.00, 0.00, 10.00] 0.39 / 1.08
SELECT__n_of__non_aggr_func__RTRIM	
0	598 (60%)
1	270 (27%)
2	82 (8.2%)
3	24 (2.4%)
4	9 (0.9%)
5	9 (0.9%)
6	6 (0.6%)
7	2 (0.2%)
SELECT__n_of__non_aggr_func__SUBSTR	
0	632 (63%)
1	245 (25%)
2	72 (7.2%)
3	22 (2.2%)
4	12 (1.2%)
5	11 (1.1%)
6	2 (0.2%)
7	3 (0.3%)
8	1 (0.1%)
SELECT__n_of__non_aggr_func__YEAR	
0	825 (83%)
1	113 (11%)
2	31 (3.1%)
3	15 (1.5%)
4	10 (1.0%)
5	1 (0.1%)
6	2 (0.2%)
7	2 (0.2%)
8	1 (0.1%)
SELECT__n_of__non_aggr_func__DOW	
0	829 (83%)
1	120 (12%)
2	26 (2.6%)
3	15 (1.5%)
4	6 (0.6%)

Query parameter or value	Descriptive statistics
5	2 (0.2%)
6	2 (0.2%)
SELECT__n_of__non__aggr__func___FLOOR	
0	925 (93%)
1	58 (5.8%)
2	14 (1.4%)
3	3 (0.3%)
SELECT__n_of__non__aggr__func___LOG	
0	857 (86%)
1	115 (12%)
2	13 (1.3%)
3	6 (0.6%)
4	6 (0.6%)
5	1 (0.1%)
7	1 (0.1%)
8	1 (0.1%)
SELECT__n_of__non__aggr__func___ROUND	
0	911 (91%)
1	73 (7.3%)
2	13 (1.3%)
3	3 (0.3%)
SELECT__n_of__non__aggr__func___SQRT	
0	785 (79%)
1	141 (14%)
2	38 (3.8%)
3	15 (1.5%)
4	9 (0.9%)
5	4 (0.4%)
6	4 (0.4%)
7	2 (0.2%)
8	2 (0.2%)
SELECT__n_of__non__aggr__func___UPPER	[0.00, 0.00, 9.00] 0.67 / 1.16
SELECT__n_of__non__aggr__func___ABS	
0	917 (92%)
1	63 (6.3%)
2	14 (1.4%)
3	6 (0.6%)
SELECT__n_of__all__non__aggr__func	[0, 3, 63] 5 / 9
SELECT__n_of__aggr__func___COUNT	[0.00, 0.00, 12.00] 0.97 / 2.05
SELECT__n_of__aggr__func___COUNT_DISTINCT	[0.00, 0.00, 13.00] 0.71 / 1.77
SELECT__n_of__aggr__func___MAX	[0.00, 0.00, 13.00] 0.83 / 1.92
SELECT__n_of__aggr__func___AVG	
0	927 (93%)
1	52 (5.2%)
2	16 (1.6%)
3	3 (0.3%)

Query parameter or value	Descriptive statistics
4	1 (0.1%)
5	1 (0.1%)
SELECT__n__of__aggr__func__MIN	[0.00, 0.00, 13.00] 0.84 / 1.91
SELECT__n__of__aggr__func__SUM	
0	931 (93%)
1	44 (4.4%)
2	19 (1.9%)
3	4 (0.4%)
4	1 (0.1%)
5	1 (0.1%)
SELECT__n__of__all__aggr__func	[0.00, 3.00, 14.00] 3.55 / 3.05
FROM__n__of__join__paths	
1	174 (17%)
2	153 (15%)
3	179 (18%)
4	159 (16%)
5	158 (16%)
6	177 (18%)
FROM__n__of__super__joins__LEFT	
0	562 (56%)
1	305 (31%)
2	114 (11%)
3	17 (1.7%)
4	2 (0.2%)
FROM__n__of__super__joins__FULL	
0	536 (54%)
1	329 (33%)
2	110 (11%)
3	21 (2.1%)
4	4 (0.4%)
FROM__n__of__super__joins__RIGHT	
0	541 (54%)
1	314 (31%)
2	122 (12%)
3	22 (2.2%)
4	1 (0.1%)
FROM__n__of__joins__INNER	[0.00, 3.00, 14.00] 3.36 / 2.57
FROM__n__of__joins__RIGHT	[0.00, 3.00, 13.00] 3.31 / 2.54
FROM__n__of__processed__rows	[5, 9,309,989,797, 45,899,938,359] 12,096,074,602 / 9,947,518,267
WHERE__n__of__predicates	[0.00, 4.00, 13.00] 3.95 / 3.01
WHERE__n__of__attribs__of__type__character__varying	
0	357 (36%)
1	286 (29%)
2	208 (21%)
3	85 (8.5%)

Query parameter or value	Descriptive statistics
4	41 (4.1%)
5	18 (1.8%)
6	3 (0.3%)
7	1 (0.1%)
8	1 (0.1%)
WHERE_n_of_attribs_of_type__character	
0	638 (64%)
1	253 (25%)
2	86 (8.6%)
3	19 (1.9%)
4	4 (0.4%)
WHERE_n_of_attribs_of_type__integer	
0	372 (37%)
1	281 (28%)
2	169 (17%)
3	108 (11%)
4	46 (4.6%)
5	17 (1.7%)
6	6 (0.6%)
7	1 (0.1%)
WHERE_n_of_attribs_of_type__numeric	
0	546 (55%)
1	297 (30%)
2	101 (10%)
3	45 (4.5%)
4	9 (0.9%)
5	1 (0.1%)
6	1 (0.1%)
WHERE_n_of_attribs_of_type__date	
0	772 (77%)
1	190 (19%)
2	31 (3.1%)
3	6 (0.6%)
4	1 (0.1%)
WHERE_n_of_pkey_attribs	
0	537 (54%)
1	288 (29%)
2	111 (11%)
3	49 (4.9%)
4	8 (0.8%)
5	7 (0.7%)
WHERE_n_of_connect_OR	[0.00, 2.00, 11.00] 2.29 / 2.45
WHERE_n_of_operators__greater_or_less	
0	330 (33%)
1	250 (25%)
2	187 (19%)

Query parameter or value	Descriptive statistics
3	124 (12%)
4	69 (6.9%)
5	27 (2.7%)
6	12 (1.2%)
7	1 (0.1%)
WHERE_n_of_operators__between	
0	510 (51%)
1	314 (31%)
2	110 (11%)
3	49 (4.9%)
4	15 (1.5%)
5	2 (0.2%)
WHERE_n_of_operators__in	
0	537 (54%)
1	290 (29%)
2	115 (12%)
3	44 (4.4%)
4	12 (1.2%)
5	2 (0.2%)
WHERE_n_of_operators__like	
0	775 (78%)
1	196 (20%)
2	26 (2.6%)
3	3 (0.3%)
WHERE_n_of_non_aggr_func__LOG	
0	928 (93%)
1	70 (7.0%)
2	2 (0.2%)
WHERE_n_of_non_aggr_func__ROUND	
0	959 (96%)
1	40 (4.0%)
2	1 (0.1%)
WHERE_n_of_non_aggr_func__ABS	
0	948 (95%)
1	50 (5.0%)
2	2 (0.2%)
WHERE_n_of_non_aggr_func__DOW	
0	964 (96%)
1	35 (3.5%)
2	1 (0.1%)
WHERE_n_of_non_aggr_func__SQRT	
0	865 (87%)
1	123 (12%)
2	12 (1.2%)
WHERE_n_of_non_aggr_func__FLOOR	
0	957 (96%)

Query parameter or value	Descriptive statistics
1	42 (4.2%)
2	1 (0.1%)
WHERE_n_of_non_aggr_func__TRUNC	
0	960 (96%)
1	39 (3.9%)
2	1 (0.1%)
WHERE_n_of_non_aggr_func__MONTH	
0	960 (96%)
1	39 (3.9%)
2	1 (0.1%)
WHERE_n_of_non_aggr_func__YEAR	
0	968 (97%)
1	32 (3.2%)
WHERE_n_of_non_aggr_func__DAY	
0	964 (96%)
1	36 (3.6%)
WHERE_n_of_all_non_aggr_func	
0	611 (61%)
1	261 (26%)
2	103 (10%)
3	21 (2.1%)
4	2 (0.2%)
5	2 (0.2%)
GROUP_BY_n_of_columns	[0.00, 2.00, 13.00] 2.94 / 2.81
HAVING_n_of_main_predicates	
0	308 (31%)
1	101 (10%)
2	157 (16%)
3	174 (17%)
4	136 (14%)
5	92 (9.2%)
6	32 (3.2%)
HAVING_n_of_main_predicates__scalar_subquery	
0	440 (44%)
1	199 (20%)
2	204 (20%)
3	157 (16%)
HAVING_n_of_subqueries__scalar_subquery	[0.0, 1.0, 26.0] 2.3 / 3.6
HAVING_n_of_processed_rows_by_subquery	[0, 1050,000,210, 1,176,498,397,464] 28,880,483,064 / 69,556,328,986
ORDER_BY_n_of_columns	
0	332 (33%)
1	322 (32%)
2	233 (23%)
3	76 (7.6%)
4	20 (2.0%)

Query parameter or value	Descriptive statistics
<i>5</i>	9 (0.9%)
<i>6</i>	7 (0.7%)
<i>9</i>	1 (0.1%)
limit	[3, 530, 999] 514 / 289
offset	[0, 0, 997] 244 / 321