

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

Scenario: 1-6jp_rjpp__g__h0ss_h0nss

Scale factor: 200 GB

The 1000-query pack was generated on: 2023-11-12

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, 199] 16 / 25
SELECT_n_of_non_aggr_func__RTRIM	[0.00, 0.00, 12.00] 0.59 / 1.10
SELECT_n_of_non_aggr_func__LOWER	
0	620 (62%)
1	250 (25%)
2	84 (8.4%)
3	23 (2.3%)
4	6 (0.6%)
5	7 (0.7%)
6	6 (0.6%)
7	2 (0.2%)
8	2 (0.2%)
SELECT_n_of_non_aggr_func__LTRIM	[0.00, 0.00, 9.00] 0.58 / 1.05
SELECT_n_of_non_aggr_func__SQRT	
0	794 (79%)

Query parameter or value	Descriptive statistics
1	150 (15%)
2	33 (3.3%)
3	13 (1.3%)
4	4 (0.4%)
5	3 (0.3%)
6	1 (0.1%)
7	2 (0.2%)
SELECT__n_of__non_aggr_func__SUBSTR	[0.00, 0.00, 10.00] 0.58 / 1.04
SELECT__n_of__non_aggr_func__ABS	
0	915 (92%)
1	66 (6.6%)
2	13 (1.3%)
3	2 (0.2%)
4	3 (0.3%)
6	1 (0.1%)
SELECT__n_of__non_aggr_func__UPPER	[0.00, 0.00, 10.00] 0.59 / 1.07
SELECT__n_of__non_aggr_func__ROUND	
0	921 (92%)
1	66 (6.6%)
2	10 (1.0%)
3	1 (0.1%)
4	1 (0.1%)
6	1 (0.1%)
SELECT__n_of__non_aggr_func__DOW	
0	862 (86%)
1	100 (10%)
2	24 (2.4%)
3	4 (0.4%)
4	5 (0.5%)
5	3 (0.3%)
7	2 (0.2%)
SELECT__n_of__non_aggr_func__YEAR	
0	841 (84%)
1	111 (11%)
12	1 (0.1%)
2	24 (2.4%)
3	6 (0.6%)
4	13 (1.3%)
5	3 (0.3%)
7	1 (0.1%)
SELECT__n_of__non_aggr_func__DAY	
0	884 (88%)
1	83 (8.3%)
2	23 (2.3%)
3	7 (0.7%)
4	1 (0.1%)

Query parameter or value	Descriptive statistics
5	2 (0.2%)
SELECT_n_of_non_aggr_func__MONTH	[0.00, 0.00, 9.00] 0.32 / 0.89
SELECT_n_of_non_aggr_func__LOG	
0	868 (87%)
1	96 (9.6%)
2	25 (2.5%)
3	7 (0.7%)
4	3 (0.3%)
8	1 (0.1%)
SELECT_n_of_non_aggr_func__TRUNC	
0	913 (91%)
1	77 (7.7%)
2	4 (0.4%)
3	4 (0.4%)
4	2 (0.2%)
SELECT_n_of_non_aggr_func__FLOOR	
0	918 (92%)
1	69 (6.9%)
2	9 (0.9%)
3	2 (0.2%)
4	2 (0.2%)
SELECT_n_of_all_non_aggr_func	[0.0, 3.0, 81.0] 4.8 / 8.0
SELECT_n_of_aggr_func__COUNT_DISTINCT	[0.00, 0.00, 13.00] 0.82 / 1.87
SELECT_n_of_aggr_func__AVG	
0	928 (93%)
1	52 (5.2%)
2	12 (1.2%)
3	4 (0.4%)
4	2 (0.2%)
5	2 (0.2%)
SELECT_n_of_aggr_func__COUNT	[0.00, 0.00, 11.00] 0.66 / 1.63
SELECT_n_of_aggr_func__MIN	[0.00, 0.00, 11.00] 0.86 / 1.91
SELECT_n_of_aggr_func__MAX	[0.00, 0.00, 13.00] 0.94 / 2.09
SELECT_n_of_aggr_func__SUM	
0	941 (94%)
1	30 (3.0%)
2	17 (1.7%)
3	8 (0.8%)
4	3 (0.3%)
6	1 (0.1%)
SELECT_n_of_all_aggr_func	[0.00, 3.00, 13.00] 3.49 / 3.05
FROM_n_of_join_paths	
1	168 (17%)
2	161 (16%)
3	175 (18%)
4	166 (17%)

Query parameter or value	Descriptive statistics
5	157 (16%)
6	173 (17%)
FROM_n_of_super_joins___FULL	
0	520 (52%)
1	331 (33%)
2	122 (12%)
3	21 (2.1%)
4	6 (0.6%)
FROM_n_of_super_joins___RIGHT	
0	573 (57%)
1	294 (29%)
2	106 (11%)
3	24 (2.4%)
4	3 (0.3%)
FROM_n_of_super_joins___LEFT	
0	558 (56%)
1	299 (30%)
2	111 (11%)
3	28 (2.8%)
4	4 (0.4%)
FROM_n_of_joins___INNER	[0.00, 3.00, 11.00] 3.33 / 2.49
FROM_n_of_joins___RIGHT	[0.00, 3.00, 14.00] 3.28 / 2.43
FROM_n_of_processed_rows	[5, 1,860,018,522, 8,652,110,714] 2,353,240,898 / 1,870,571,863
WHERE_n_of_predicates	[0.00, 3.00, 13.00] 3.88 / 2.99
WHERE_n_of_attribs_of_type___character	
0	638 (64%)
1	257 (26%)
2	85 (8.5%)
3	14 (1.4%)
4	6 (0.6%)
WHERE_n_of_attribs_of_type___character_varying	
0	375 (38%)
1	259 (26%)
2	191 (19%)
3	108 (11%)
4	42 (4.2%)
5	18 (1.8%)
6	4 (0.4%)
7	2 (0.2%)
8	1 (0.1%)
WHERE_n_of_attribs_of_type___integer	
0	363 (36%)
1	309 (31%)
2	192 (19%)
3	84 (8.4%)

Query parameter or value	Descriptive statistics
4	37 (3.7%)
5	12 (1.2%)
6	3 (0.3%)
WHERE_n_of_attribs_of_type__date	
0	773 (77%)
1	178 (18%)
2	37 (3.7%)
3	11 (1.1%)
4	1 (0.1%)
WHERE_n_of_attribs_of_type__numeric	
0	548 (55%)
1	298 (30%)
2	114 (11%)
3	27 (2.7%)
4	11 (1.1%)
5	2 (0.2%)
WHERE_n_of_pkey_attribs	
0	524 (52%)
1	329 (33%)
2	111 (11%)
3	26 (2.6%)
4	10 (1.0%)
WHERE_n_of_connect_OR	[0.00, 1.00, 11.00] 2.24 / 2.44
WHERE_n_of_operators__greater_or_less	
0	331 (33%)
1	263 (26%)
2	183 (18%)
3	119 (12%)
4	59 (5.9%)
5	33 (3.3%)
6	6 (0.6%)
7	5 (0.5%)
8	1 (0.1%)
WHERE_n_of_operators__in	
0	528 (53%)
1	294 (29%)
2	121 (12%)
3	46 (4.6%)
4	7 (0.7%)
5	3 (0.3%)
7	1 (0.1%)
WHERE_n_of_operators__like	
0	794 (79%)
1	180 (18%)
2	22 (2.2%)
3	2 (0.2%)

Query parameter or value	Descriptive statistics
4	1 (0.1%)
5	1 (0.1%)
WHERE_n_of_operators_between	
0	539 (54%)
1	294 (29%)
2	114 (11%)
3	41 (4.1%)
4	8 (0.8%)
5	1 (0.1%)
6	2 (0.2%)
7	1 (0.1%)
WHERE_n_of_non_aggr_func__SQRT	
0	867 (87%)
1	118 (12%)
2	15 (1.5%)
WHERE_n_of_non_aggr_func__MONTH	
0	964 (96%)
1	34 (3.4%)
2	2 (0.2%)
WHERE_n_of_non_aggr_func__DAY	
0	963 (96%)
1	35 (3.5%)
2	2 (0.2%)
WHERE_n_of_non_aggr_func__LOG	
0	922 (92%)
1	71 (7.1%)
2	5 (0.5%)
3	2 (0.2%)
WHERE_n_of_non_aggr_func__ROUND	
0	959 (96%)
1	41 (4.1%)
WHERE_n_of_non_aggr_func__YEAR	
0	959 (96%)
1	40 (4.0%)
2	1 (0.1%)
WHERE_n_of_non_aggr_func__TRUNC	
0	963 (96%)
1	36 (3.6%)
2	1 (0.1%)
WHERE_n_of_non_aggr_func__FLOOR	
0	961 (96%)
1	39 (3.9%)
WHERE_n_of_non_aggr_func__ABS	
0	954 (95%)
1	44 (4.4%)
2	2 (0.2%)

Query parameter or value	Descriptive statistics
WHERE_n_of_non_aggr_func__DOW	
0	959 (96%)
1	39 (3.9%)
2	1 (0.1%)
3	1 (0.1%)
WHERE_n_of_all_non_aggr_func	
0	607 (61%)
1	270 (27%)
2	90 (9.0%)
3	22 (2.2%)
4	8 (0.8%)
5	2 (0.2%)
6	1 (0.1%)
GROUP_BY_n_of_columns	[0.00, 2.00, 12.00] 3.00 / 2.84
HAVING_n_of_main_predicates	
0	433 (43%)
1	190 (19%)
2	182 (18%)
3	195 (20%)
ORDER_BY_n_of_columns	
0	287 (29%)
1	343 (34%)
2	240 (24%)
3	98 (9.8%)
4	16 (1.6%)
5	8 (0.8%)
6	2 (0.2%)
7	6 (0.6%)
limit	[1, 495, 1,000] 493 / 290
offset	[0, 21, 998] 241 / 313