

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

Scenario: 1-6jp_ujpp__g__h0-3ss_h0-3nss

Scale factor: 2000 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, 175] 15 / 23
SELECT_n_of_non_aggr_func__UPPER	[0.00, 0.00, 9.00] 0.58 / 1.01
SELECT_n_of_non_aggr_func__LOWER	
0	607 (61%)
1	261 (26%)
2	88 (8.8%)
3	23 (2.3%)
4	9 (0.9%)
5	4 (0.4%)
6	6 (0.6%)
8	2 (0.2%)
SELECT_n_of_non_aggr_func__LTRIM	[0.00, 0.00, 9.00] 0.58 / 1.02
SELECT_n_of_non_aggr_func__RTRIM	[0.00, 0.00, 9.00] 0.62 / 1.03
SELECT_n_of_non_aggr_func__MONTH	
0	818 (82%)

Query parameter or value	Descriptive statistics
1	126 (13%)
2	27 (2.7%)
3	14 (1.4%)
4	3 (0.3%)
5	7 (0.7%)
6	3 (0.3%)
7	1 (0.1%)
9	1 (0.1%)
SELECT_n_of_non_aggr_func__SUBSTR	
0	622 (62%)
1	251 (25%)
10	2 (0.2%)
2	81 (8.1%)
3	19 (1.9%)
4	17 (1.7%)
5	4 (0.4%)
6	3 (0.3%)
7	1 (0.1%)
SELECT_n_of_non_aggr_func__FLOOR	
0	927 (93%)
1	54 (5.4%)
2	17 (1.7%)
3	2 (0.2%)
SELECT_n_of_non_aggr_func__ROUND	
0	913 (91%)
1	79 (7.9%)
2	7 (0.7%)
3	1 (0.1%)
SELECT_n_of_non_aggr_func__ABS	
0	923 (92%)
1	65 (6.5%)
2	12 (1.2%)
SELECT_n_of_non_aggr_func__DAY	
0	902 (90%)
1	72 (7.2%)
2	18 (1.8%)
3	6 (0.6%)
4	1 (0.1%)
5	1 (0.1%)
SELECT_n_of_non_aggr_func__DOW	
0	864 (86%)
1	94 (9.4%)
2	24 (2.4%)
3	11 (1.1%)
4	5 (0.5%)
5	2 (0.2%)

Query parameter or value	Descriptive statistics
SELECT_n_of_non_aggr_func___SQRT	
0	814 (81%)
1	123 (12%)
2	30 (3.0%)
3	17 (1.7%)
4	8 (0.8%)
5	3 (0.3%)
6	3 (0.3%)
7	2 (0.2%)
SELECT_n_of_non_aggr_func___TRUNC	
0	902 (90%)
1	83 (8.3%)
2	14 (1.4%)
3	1 (0.1%)
SELECT_n_of_non_aggr_func___YEAR	
0	840 (84%)
1	107 (11%)
2	31 (3.1%)
3	7 (0.7%)
4	7 (0.7%)
5	4 (0.4%)
6	2 (0.2%)
7	2 (0.2%)
SELECT_n_of_non_aggr_func___LOG	
0	855 (86%)
1	107 (11%)
2	25 (2.5%)
3	7 (0.7%)
4	4 (0.4%)
5	1 (0.1%)
6	1 (0.1%)
SELECT_n_of_all_non_aggr_func	[0.0, 3.0, 65.0] 4.8 / 7.5
SELECT_n_of_aggr_func___COUNT_DISTINCT	[0.00, 0.00, 13.00] 1.03 / 2.15
SELECT_n_of_aggr_func___COUNT	[0.00, 0.00, 11.00] 0.81 / 1.85
SELECT_n_of_aggr_func___AVG	
0	929 (93%)
1	44 (4.4%)
2	17 (1.7%)
3	8 (0.8%)
4	2 (0.2%)
SELECT_n_of_aggr_func___MAX	[0.00, 0.00, 14.00] 0.73 / 1.75
SELECT_n_of_aggr_func___MIN	[0.00, 0.00, 13.00] 0.79 / 1.91
SELECT_n_of_aggr_func___SUM	
0	938 (94%)
1	35 (3.5%)
2	21 (2.1%)

Query parameter or value	Descriptive statistics
3	4 (0.4%)
4	1 (0.1%)
5	1 (0.1%)
SELECT_n_of_all_aggr_func	[0.00, 3.00, 14.00] 3.57 / 3.11
FROM_n_of_join_paths	
1	171 (17%)
2	151 (15%)
3	187 (19%)
4	162 (16%)
5	148 (15%)
6	181 (18%)
FROM_n_of_super_joins__RIGHT	
0	535 (54%)
1	342 (34%)
2	93 (9.3%)
3	24 (2.4%)
4	5 (0.5%)
5	1 (0.1%)
FROM_n_of_super_joins__LEFT	
0	543 (54%)
1	310 (31%)
2	113 (11%)
3	32 (3.2%)
4	2 (0.2%)
FROM_n_of_super_joins__FULL	
0	551 (55%)
1	322 (32%)
2	98 (9.8%)
3	26 (2.6%)
4	3 (0.3%)
FROM_n_of_joins__INNER	[0.00, 3.00, 12.00] 3.32 / 2.35
FROM_n_of_joins__RIGHT	[0.00, 3.00, 13.00] 3.24 / 2.55
FROM_n_of_processed_rows	[5, 17,620,027,828, 91,500,166,886] 22,744,939,247 / 18,980,584,550
WHERE_n_of_predicates	[0.00, 3.00, 12.00] 3.74 / 2.95
WHERE_n_of_attribs_of_type__character_varying	
0	364 (36%)
1	289 (29%)
2	186 (19%)
3	89 (8.9%)
4	50 (5.0%)
5	18 (1.8%)
6	3 (0.3%)
7	1 (0.1%)
WHERE_n_of_attribs_of_type__integer	
0	393 (39%)

Query parameter or value	Descriptive statistics
1	278 (28%)
2	184 (18%)
3	92 (9.2%)
4	35 (3.5%)
5	17 (1.7%)
6	1 (0.1%)
WHERE_n_of_attribs_of_type__character	
0	661 (66%)
1	247 (25%)
2	74 (7.4%)
3	16 (1.6%)
4	2 (0.2%)
WHERE_n_of_attribs_of_type__date	
0	805 (81%)
1	155 (16%)
2	35 (3.5%)
3	5 (0.5%)
WHERE_n_of_attribs_of_type__numeric	
0	578 (58%)
1	257 (26%)
2	120 (12%)
3	32 (3.2%)
4	8 (0.8%)
5	4 (0.4%)
6	1 (0.1%)
WHERE_n_of_pkey_attribs	
0	544 (54%)
1	281 (28%)
2	128 (13%)
3	34 (3.4%)
4	12 (1.2%)
5	1 (0.1%)
WHERE_n_of_connect_OR	[0.00, 1.00, 11.00] 2.14 / 2.40
WHERE_n_of_operators__greater_or_less	
0	366 (37%)
1	250 (25%)
2	162 (16%)
3	120 (12%)
4	61 (6.1%)
5	29 (2.9%)
6	9 (0.9%)
7	3 (0.3%)
WHERE_n_of_operators__between	
0	544 (54%)
1	281 (28%)
2	129 (13%)

Query parameter or value	Descriptive statistics
3	37 (3.7%)
4	8 (0.8%)
5	1 (0.1%)
WHERE_n_of_operators_in	
0	530 (53%)
1	311 (31%)
2	114 (11%)
3	32 (3.2%)
4	8 (0.8%)
5	3 (0.3%)
6	2 (0.2%)
WHERE_n_of_operators_like	
0	779 (78%)
1	187 (19%)
2	30 (3.0%)
3	4 (0.4%)
WHERE_n_of_non_aggr_func_sqrt	
0	862 (86%)
1	124 (12%)
2	14 (1.4%)
WHERE_n_of_non_aggr_func_month	
0	963 (96%)
1	37 (3.7%)
WHERE_n_of_non_aggr_func_round	
0	956 (96%)
1	43 (4.3%)
2	1 (0.1%)
WHERE_n_of_non_aggr_func_abs	
0	968 (97%)
1	30 (3.0%)
2	2 (0.2%)
WHERE_n_of_non_aggr_func_floor	
0	957 (96%)
1	42 (4.2%)
2	1 (0.1%)
WHERE_n_of_non_aggr_func_log	
0	924 (92%)
1	71 (7.1%)
2	4 (0.4%)
3	1 (0.1%)
WHERE_n_of_non_aggr_func_dow	
0	965 (97%)
1	35 (3.5%)
WHERE_n_of_non_aggr_func_trunc	
0	954 (95%)
1	45 (4.5%)

Query parameter or value	Descriptive statistics
2	1 (0.1%)
WHERE_n_of_non_aggr_func__DAY	
0	969 (97%)
1	30 (3.0%)
2	1 (0.1%)
WHERE_n_of_non_aggr_func__YEAR	
0	964 (96%)
1	36 (3.6%)
WHERE_n_of_all_non_aggr_func	
0	629 (63%)
1	242 (24%)
2	95 (9.5%)
3	25 (2.5%)
4	8 (0.8%)
5	1 (0.1%)
GROUP_BY_n_of_columns	[0.00, 2.00, 12.00] 3.02 / 2.80
HAVING_n_of_main_predicates	[0.00, 4.00, 9.00] 3.42 / 2.62
HAVING_n_of_main_predicates__non_scalar_subquery	
0	432 (43%)
1	186 (19%)
2	210 (21%)
3	172 (17%)
HAVING_n_of_main_predicates__scalar_subquery	
0	441 (44%)
1	148 (15%)
2	187 (19%)
3	224 (22%)
HAVING_n_of_subqueries__non_scalar_subquery	
0	432 (43%)
1	186 (19%)
2	210 (21%)
3	172 (17%)
HAVING_n_of_subqueries__scalar_subquery	[0.0, 1.0, 21.0] 2.5 / 3.7
HAVING_n_of_processed_rows_by_subquery	[0, 20, 560, 055, 783, 1, 750, 763, 198, 288] 83,579,943,374 / 154,825,017,564
ORDER_BY_n_of_columns	
0	291 (29%)
1	350 (35%)
2	220 (22%)
3	101 (10%)
4	23 (2.3%)
5	5 (0.5%)
6	7 (0.7%)
7	3 (0.3%)
limit	[1, 490, 1,000] 495 / 285

offset

[0, 54, 997] 269 / 327
