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

Scenario: 1-6jp_rjjp__g__h0-3ss_h0nss

Scale factor: 2 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, 177] 16 / 24
SELECT_n_of_non_aggr_func___ABS	
0	922 (92%)
1	68 (6.8%)
2	4 (0.4%)
3	5 (0.5%)
5	1 (0.1%)
SELECT_n_of_non_aggr_func___DOW	
0	870 (87%)
1	100 (10%)
2	17 (1.7%)
3	7 (0.7%)
4	3 (0.3%)
5	3 (0.3%)
SELECT_n_of_non_aggr_func___LOWER	

Query parameter or value	Descriptive statistics
0	616 (62%)
1	252 (25%)
2	86 (8.6%)
3	27 (2.7%)
4	8 (0.8%)
5	7 (0.7%)
6	3 (0.3%)
8	1 (0.1%)
SELECT_n_of_non_aggr_func___LTRIM	
0	615 (62%)
1	271 (27%)
2	77 (7.7%)
3	16 (1.6%)
4	12 (1.2%)
5	4 (0.4%)
6	4 (0.4%)
8	1 (0.1%)
SELECT_n_of_non_aggr_func___MONTH	
0	815 (82%)
1	131 (13%)
10	1 (0.1%)
2	28 (2.8%)
3	15 (1.5%)
4	5 (0.5%)
5	3 (0.3%)
6	2 (0.2%)
SELECT_n_of_non_aggr_func___RTRIM	
0	626 (63%)
1	252 (25%)
2	76 (7.6%)
3	25 (2.5%)
4	13 (1.3%)
5	4 (0.4%)
6	2 (0.2%)
7	1 (0.1%)
9	1 (0.1%)
SELECT_n_of_non_aggr_func___YEAR	
0	832 (83%)
1	126 (13%)
2	24 (2.4%)
3	6 (0.6%)
4	8 (0.8%)
5	1 (0.1%)
6	2 (0.2%)
7	1 (0.1%)
SELECT_n_of_non_aggr_func___SUBSTR	[0.00, 0.00, 10.00] 0.61 / 1.08

Query parameter or value	Descriptive statistics
SELECT_n_of_non_aggr_func___UPPER	
0	647 (65%)
1	236 (24%)
10	1 (0.1%)
2	65 (6.5%)
3	26 (2.6%)
4	12 (1.2%)
5	8 (0.8%)
6	5 (0.5%)
SELECT_n_of_non_aggr_func___LOG	
0	876 (88%)
1	96 (9.6%)
2	18 (1.8%)
3	7 (0.7%)
4	2 (0.2%)
7	1 (0.1%)
SELECT_n_of_non_aggr_func___ROUND	
0	911 (91%)
1	79 (7.9%)
2	9 (0.9%)
3	1 (0.1%)
SELECT_n_of_non_aggr_func___TRUNC	
0	915 (92%)
1	72 (7.2%)
2	9 (0.9%)
3	4 (0.4%)
SELECT_n_of_non_aggr_func___SQRT	
0	802 (80%)
1	136 (14%)
2	32 (3.2%)
3	20 (2.0%)
4	6 (0.6%)
5	3 (0.3%)
6	1 (0.1%)
SELECT_n_of_non_aggr_func___DAY	
0	886 (89%)
1	93 (9.3%)
2	16 (1.6%)
3	3 (0.3%)
4	2 (0.2%)
SELECT_n_of_non_aggr_func___FLOOR	
0	917 (92%)
1	73 (7.3%)
2	6 (0.6%)
3	4 (0.4%)
SELECT_n_of_all_non_aggr_func	[0.0, 3.0, 59.0] 4.7 / 7.0

Query parameter or value	Descriptive statistics
SELECT_n_of_aggr_func___COUNT_DISTINCT	[0.00, 0.00, 12.00] 0.80 / 1.87
SELECT_n_of_aggr_func___MAX	[0.00, 0.00, 11.00] 0.83 / 1.83
SELECT_n_of_aggr_func___MIN	[0.00, 0.00, 12.00] 0.81 / 1.90
SELECT_n_of_aggr_func___SUM	
0	937 (94%)
1	46 (4.6%)
2	14 (1.4%)
3	3 (0.3%)
SELECT_n_of_aggr_func___COUNT	[0.00, 0.00, 15.00] 0.82 / 2.02
SELECT_n_of_aggr_func___AVG	
0	934 (93%)
1	40 (4.0%)
2	20 (2.0%)
3	5 (0.5%)
5	1 (0.1%)
SELECT_n_of_all_aggr_func	[0.00, 3.00, 17.00] 3.43 / 3.10
FROM_n_of_join_paths	
1	175 (18%)
2	164 (16%)
3	166 (17%)
4	174 (17%)
5	157 (16%)
6	164 (16%)
FROM_n_of_super_joins___LEFT	
0	540 (54%)
1	306 (31%)
2	122 (12%)
3	27 (2.7%)
4	5 (0.5%)
FROM_n_of_super_joins___RIGHT	
0	561 (56%)
1	304 (30%)
2	97 (9.7%)
3	37 (3.7%)
4	1 (0.1%)
FROM_n_of_super_joins___FULL	
0	567 (57%)
1	290 (29%)
2	122 (12%)
3	20 (2.0%)
4	1 (0.1%)
FROM_n_of_joins___INNER	[0.00, 3.00, 12.00] 3.15 / 2.45
FROM_n_of_joins___RIGHT	[0.00, 3.00, 13.00] 3.26 / 2.51
FROM_n_of_processed_rows	[5, 18,485,449, 88,114,540] 22,943,987 / 19,468,114
WHERE_n_of_predicates	[0.0, 3.0, 13.0] 3.9 / 3.1
WHERE_n_of_attribs_of_type___character	

Query parameter or value	Descriptive statistics
0	663 (66%)
1	232 (23%)
2	76 (7.6%)
3	26 (2.6%)
4	3 (0.3%)
WHERE_n_of_attribs_of_type___character_varying	
0	373 (37%)
1	264 (26%)
2	188 (19%)
3	98 (9.8%)
4	50 (5.0%)
5	20 (2.0%)
6	5 (0.5%)
7	2 (0.2%)
WHERE_n_of_attribs_of_type___integer	
0	369 (37%)
1	279 (28%)
2	197 (20%)
3	97 (9.7%)
4	37 (3.7%)
5	15 (1.5%)
6	6 (0.6%)
WHERE_n_of_attribs_of_type___numeric	
0	567 (57%)
1	260 (26%)
2	115 (12%)
3	47 (4.7%)
4	10 (1.0%)
5	1 (0.1%)
WHERE_n_of_attribs_of_type___date	
0	795 (80%)
1	160 (16%)
2	35 (3.5%)
3	9 (0.9%)
4	1 (0.1%)
WHERE_n_of_pkey_attribs	
0	539 (54%)
1	308 (31%)
2	120 (12%)
3	26 (2.6%)
4	5 (0.5%)
5	1 (0.1%)
6	1 (0.1%)
WHERE_n_of_connect_OR	[0.00, 1.00, 11.00] 2.29 / 2.48
WHERE_n_of_operators___between	
0	523 (52%)

Query parameter or value	Descriptive statistics
1	297 (30%)
2	118 (12%)
3	44 (4.4%)
4	13 (1.3%)
5	3 (0.3%)
6	2 (0.2%)
WHERE_n_of_operators___greater_or_less	
0	342 (34%)
1	252 (25%)
2	178 (18%)
3	118 (12%)
4	62 (6.2%)
5	29 (2.9%)
6	16 (1.6%)
7	3 (0.3%)
WHERE_n_of_operators___like	
0	792 (79%)
1	172 (17%)
2	32 (3.2%)
3	4 (0.4%)
WHERE_n_of_operators___in	
0	522 (52%)
1	287 (29%)
2	129 (13%)
3	49 (4.9%)
4	10 (1.0%)
5	3 (0.3%)
WHERE_n_of_non_aggr_func___FLOOR	
0	960 (96%)
1	40 (4.0%)
WHERE_n_of_non_aggr_func___SQRT	
0	888 (89%)
1	106 (11%)
2	6 (0.6%)
WHERE_n_of_non_aggr_func___MONTH	
0	965 (97%)
1	34 (3.4%)
2	1 (0.1%)
WHERE_n_of_non_aggr_func___DOW	
0	971 (97%)
1	27 (2.7%)
2	2 (0.2%)
WHERE_n_of_non_aggr_func___YEAR	
0	969 (97%)
1	31 (3.1%)
WHERE_n_of_non_aggr_func___ABS	

Query parameter or value	Descriptive statistics
0	956 (96%)
1	43 (4.3%)
2	1 (0.1%)
WHERE_n_of_non_aggr_func___LOG	
0	906 (91%)
1	88 (8.8%)
2	6 (0.6%)
WHERE_n_of_non_aggr_func___DAY	
0	954 (95%)
1	45 (4.5%)
2	1 (0.1%)
WHERE_n_of_non_aggr_func___ROUND	
0	948 (95%)
1	50 (5.0%)
2	2 (0.2%)
WHERE_n_of_non_aggr_func___TRUNC	
0	957 (96%)
1	42 (4.2%)
2	1 (0.1%)
WHERE_n_of_all_non_aggr_func	
0	612 (61%)
1	261 (26%)
2	101 (10%)
3	22 (2.2%)
4	3 (0.3%)
5	1 (0.1%)
GROUP_BY_n_of_columns	[0.00, 2.00, 12.00] 3.00 / 2.80
HAVING_n_of_main_predicates	
0	295 (30%)
1	87 (8.7%)
2	118 (12%)
3	218 (22%)
4	146 (15%)
5	90 (9.0%)
6	46 (4.6%)
HAVING_n_of_main_predicates___scalar_subquery	
0	434 (43%)
1	177 (18%)
2	195 (20%)
3	194 (19%)
HAVING_n_of_subqueries___scalar_subquery	[0.0, 1.0, 22.0] 2.5 / 3.7
HAVING_n_of_processed_rows_by_subqueries	[0, 3,469,849, 1,044,882,000] 52,508,233 / 110,786,315
ORDER_BY_n_of_columns	
0	293 (29%)
1	329 (33%)
2	233 (23%)

Query parameter or value	Descriptive statistics
3	100 (10%)
4	29 (2.9%)
5	10 (1.0%)
6	3 (0.3%)
7	1 (0.1%)
8	2 (0.2%)
limit	[1, 491, 1,000] 494 / 291
offset	[0, 13, 1,000] 253 / 321