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

Scenario: 1-3jp_ujjp__g__h0-3ss_h0nss

Scale factor: 100 GB

The 1000-query pack was generated on: 2023-11-09

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, 115] 11 / 15
SELECT_n_of_non_aggr_func___ABS	
0	944 (94%)
1	48 (4.8%)
2	5 (0.5%)
3	2 (0.2%)
4	1 (0.1%)
SELECT_n_of_non_aggr_func___DOW	
0	879 (88%)
1	84 (8.4%)
2	20 (2.0%)
3	15 (1.5%)
4	1 (0.1%)
6	1 (0.1%)
SELECT_n_of_non_aggr_func___LOG	

Query parameter or value	Descriptive statistics
0	884 (88%)
1	92 (9.2%)
2	20 (2.0%)
3	4 (0.4%)
SELECT_n_of_non_aggr_func___LOWER	
0	663 (66%)
1	242 (24%)
2	66 (6.6%)
3	22 (2.2%)
4	5 (0.5%)
5	1 (0.1%)
6	1 (0.1%)
SELECT_n_of_non_aggr_func___RTRIM	
0	669 (67%)
1	253 (25%)
2	51 (5.1%)
3	15 (1.5%)
4	5 (0.5%)
5	2 (0.2%)
6	4 (0.4%)
7	1 (0.1%)
SELECT_n_of_non_aggr_func___SUBSTR	
0	660 (66%)
1	260 (26%)
2	56 (5.6%)
3	14 (1.4%)
4	6 (0.6%)
5	4 (0.4%)
SELECT_n_of_non_aggr_func___UPPER	
0	689 (69%)
1	236 (24%)
2	50 (5.0%)
3	17 (1.7%)
4	5 (0.5%)
5	2 (0.2%)
7	1 (0.1%)
SELECT_n_of_non_aggr_func___LTRIM	
0	699 (70%)
1	235 (24%)
2	41 (4.1%)
3	16 (1.6%)
4	7 (0.7%)
5	2 (0.2%)
SELECT_n_of_non_aggr_func___MONTH	
0	824 (82%)
1	133 (13%)

Query parameter or value	Descriptive statistics
2	21 (2.1%)
3	14 (1.4%)
4	4 (0.4%)
5	2 (0.2%)
7	1 (0.1%)
9	1 (0.1%)
SELECT_n_of_non_aggr_func___YEAR	
0	850 (85%)
1	106 (11%)
2	27 (2.7%)
3	8 (0.8%)
4	7 (0.7%)
5	1 (0.1%)
6	1 (0.1%)
SELECT_n_of_non_aggr_func___FLOOR	
0	931 (93%)
1	62 (6.2%)
2	5 (0.5%)
3	1 (0.1%)
4	1 (0.1%)
SELECT_n_of_non_aggr_func___DAY	
0	897 (90%)
1	90 (9.0%)
2	7 (0.7%)
3	5 (0.5%)
4	1 (0.1%)
SELECT_n_of_non_aggr_func___SQRT	
0	835 (84%)
1	115 (12%)
2	31 (3.1%)
3	11 (1.1%)
4	7 (0.7%)
5	1 (0.1%)
SELECT_n_of_non_aggr_func___TRUNC	
0	942 (94%)
1	54 (5.4%)
2	4 (0.4%)
SELECT_n_of_non_aggr_func___ROUND	
0	940 (94%)
1	56 (5.6%)
2	4 (0.4%)
SELECT_n_of_all_non_aggr_func	[0.0, 2.0, 52.0] 3.7 / 5.3
SELECT_n_of_aggr_func___MAX	[0.00, 0.00, 10.00] 0.56 / 1.37
SELECT_n_of_aggr_func___COUNT	[0.00, 0.00, 12.00] 0.60 / 1.38
SELECT_n_of_aggr_func___MIN	
0	783 (78%)

Query parameter or value	Descriptive statistics
1	67 (6.7%)
11	1 (0.1%)
2	47 (4.7%)
3	47 (4.7%)
4	25 (2.5%)
5	17 (1.7%)
6	11 (1.1%)
8	2 (0.2%)
SELECT_n_of_aggr_func___COUNT_DISTINCT	[0.00, 0.00, 9.00] 0.64 / 1.41
SELECT_n_of_aggr_func___AVG	
0	944 (94%)
1	38 (3.8%)
2	15 (1.5%)
3	2 (0.2%)
4	1 (0.1%)
SELECT_n_of_aggr_func___SUM	
0	957 (96%)
1	35 (3.5%)
2	7 (0.7%)
3	1 (0.1%)
SELECT_n_of_all_aggr_func	[0.00, 2.00, 12.00] 2.52 / 2.22
FROM_n_of_join_paths	
1	341 (34%)
2	345 (35%)
3	314 (31%)
FROM_n_of_super_joins___FULL	
0	760 (76%)
1	228 (23%)
2	12 (1.2%)
FROM_n_of_super_joins___LEFT	
0	774 (77%)
1	209 (21%)
2	17 (1.7%)
FROM_n_of_super_joins___RIGHT	
0	784 (78%)
1	196 (20%)
2	20 (2.0%)
FROM_n_of_joins___INNER	
0	253 (25%)
1	273 (27%)
2	195 (20%)
3	144 (14%)
4	82 (8.2%)
5	36 (3.6%)
6	11 (1.1%)
7	6 (0.6%)

Query parameter or value	Descriptive statistics
FROM_n_of_joins___RIGHT	
0	238 (24%)
1	267 (27%)
2	220 (22%)
3	147 (15%)
4	71 (7.1%)
5	40 (4.0%)
6	12 (1.2%)
7	2 (0.2%)
8	3 (0.3%)
FROM_n_of_processed_rows	[5, 681,037,927, 2,295,113,791] 648,085,466 / 607,903,987
WHERE_n_of_predicates	[0.00, 2.00, 10.00] 2.78 / 2.24
WHERE_n_of_attribs_of_type___character	
0	725 (73%)
1	218 (22%)
2	47 (4.7%)
3	9 (0.9%)
4	1 (0.1%)
WHERE_n_of_attribs_of_type___character_varying	
0	426 (43%)
1	309 (31%)
2	182 (18%)
3	61 (6.1%)
4	19 (1.9%)
5	2 (0.2%)
7	1 (0.1%)
WHERE_n_of_attribs_of_type___integer	
0	481 (48%)
1	281 (28%)
2	160 (16%)
3	55 (5.5%)
4	19 (1.9%)
5	4 (0.4%)
WHERE_n_of_attribs_of_type___numeric	
0	673 (67%)
1	237 (24%)
2	76 (7.6%)
3	10 (1.0%)
4	4 (0.4%)
WHERE_n_of_attribs_of_type___date	
0	842 (84%)
1	130 (13%)
2	24 (2.4%)
3	4 (0.4%)
WHERE_n_of_pkey_attribs	

Query parameter or value	Descriptive statistics
0	634 (63%)
1	263 (26%)
2	87 (8.7%)
3	15 (1.5%)
4	1 (0.1%)
WHERE_n_of_connect_OR	[0.00, 1.00, 9.00] 1.35 / 1.68
WHERE_n_of_operators___between	
0	638 (64%)
1	249 (25%)
2	83 (8.3%)
3	26 (2.6%)
4	3 (0.3%)
5	1 (0.1%)
WHERE_n_of_operators___greater_or_less	
0	416 (42%)
1	301 (30%)
2	173 (17%)
3	74 (7.4%)
4	30 (3.0%)
5	5 (0.5%)
6	1 (0.1%)
WHERE_n_of_operators___in	
0	622 (62%)
1	269 (27%)
2	86 (8.6%)
3	19 (1.9%)
4	3 (0.3%)
5	1 (0.1%)
WHERE_n_of_operators___like	
0	824 (82%)
1	157 (16%)
2	18 (1.8%)
3	1 (0.1%)
WHERE_n_of_non_aggr_func___ABS	
0	972 (97%)
1	26 (2.6%)
2	2 (0.2%)
WHERE_n_of_non_aggr_func___LOG	
0	957 (96%)
1	43 (4.3%)
WHERE_n_of_non_aggr_func___ROUND	
0	973 (97%)
1	27 (2.7%)
WHERE_n_of_non_aggr_func___SQRT	
0	912 (91%)
1	82 (8.2%)

Query parameter or value	Descriptive statistics
2	5 (0.5%)
3	1 (0.1%)
WHERE_n_of_non_aggr_func___MONTH	
0	973 (97%)
1	26 (2.6%)
2	1 (0.1%)
WHERE_n_of_non_aggr_func___DAY	
0	976 (98%)
1	24 (2.4%)
WHERE_n_of_non_aggr_func___DOW	
0	963 (96%)
1	36 (3.6%)
2	1 (0.1%)
WHERE_n_of_non_aggr_func___YEAR	
0	978 (98%)
1	21 (2.1%)
2	1 (0.1%)
WHERE_n_of_non_aggr_func___FLOOR	
0	965 (97%)
1	35 (3.5%)
WHERE_n_of_non_aggr_func___TRUNC	
0	976 (98%)
1	23 (2.3%)
2	1 (0.1%)
WHERE_n_of_all_non_aggr_func	
0	718 (72%)
1	209 (21%)
2	62 (6.2%)
3	9 (0.9%)
4	2 (0.2%)
GROUP_BY_n_of_columns	[0.00, 2.00, 9.00] 2.31 / 2.15
HAVING_n_of_main_predicates	
0	326 (33%)
1	99 (9.9%)
2	115 (12%)
3	186 (19%)
4	144 (14%)
5	89 (8.9%)
6	41 (4.1%)
HAVING_n_of_main_predicates___scalar_subquery	
0	459 (46%)
1	187 (19%)
2	184 (18%)
3	170 (17%)
HAVING_n_of_subqueries___scalar_subquery	[0.0, 1.0, 27.0] 2.2 / 3.6

Query parameter or value	Descriptive statistics
HAVING_n_of_processed_rows_by_subqueries	[0, 3,500,135, 36,776,048,193] 1,435,953,611 / 3,540,139,337
ORDER_BY_n_of_columns	
0	293 (29%)
1	359 (36%)
2	235 (24%)
3	78 (7.8%)
4	18 (1.8%)
5	10 (1.0%)
6	3 (0.3%)
7	2 (0.2%)
9	2 (0.2%)
limit	[2, 490, 1,000] 494 / 285
offset	[0, 2, 996] 245 / 317