

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

Scenario: 1-3jp_rjpp__g__h0-3ss_h0-3nss

Scale factor: 1 GB

The 1000-query pack was generated on: 2023-11-05

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, 94] 11 / 13
SELECT_n_of_non_aggr_func__LOG	
0	906 (91%)
1	75 (7.5%)
2	14 (1.4%)
3	4 (0.4%)
4	1 (0.1%)
SELECT_n_of_non_aggr_func__LOWER	
0	684 (68%)
1	247 (25%)
2	53 (5.3%)
3	5 (0.5%)
4	6 (0.6%)
5	3 (0.3%)
6	2 (0.2%)

Query parameter or value	Descriptive statistics
SELECT__n_of__non__aggr__func__LTRIM	
0	687 (69%)
1	243 (24%)
2	51 (5.1%)
3	16 (1.6%)
4	3 (0.3%)
SELECT__n_of__non__aggr__func__SUBSTR	
0	679 (68%)
1	234 (23%)
2	60 (6.0%)
3	17 (1.7%)
4	9 (0.9%)
5	1 (0.1%)
SELECT__n_of__non__aggr__func__RTRIM	
0	682 (68%)
1	248 (25%)
2	53 (5.3%)
3	12 (1.2%)
4	2 (0.2%)
5	2 (0.2%)
7	1 (0.1%)
SELECT__n_of__non__aggr__func__SQRT	
0	848 (85%)
1	113 (11%)
2	25 (2.5%)
3	8 (0.8%)
4	5 (0.5%)
5	1 (0.1%)
SELECT__n_of__non__aggr__func__MONTH	
0	830 (83%)
1	129 (13%)
2	24 (2.4%)
3	9 (0.9%)
4	7 (0.7%)
5	1 (0.1%)
SELECT__n_of__non__aggr__func__UPPER	
0	682 (68%)
1	231 (23%)
2	63 (6.3%)
3	15 (1.5%)
4	6 (0.6%)
6	2 (0.2%)
7	1 (0.1%)
SELECT__n_of__non__aggr__func__YEAR	
0	861 (86%)
1	112 (11%)

Query parameter or value	Descriptive statistics
2	15 (1.5%)
3	8 (0.8%)
4	3 (0.3%)
5	1 (0.1%)
SELECT_n_of_non_aggr_func___DOW	
0	891 (89%)
1	90 (9.0%)
2	17 (1.7%)
3	1 (0.1%)
4	1 (0.1%)
SELECT_n_of_non_aggr_func___FLOOR	
0	948 (95%)
1	49 (4.9%)
2	1 (0.1%)
3	2 (0.2%)
SELECT_n_of_non_aggr_func___DAY	
0	889 (89%)
1	97 (9.7%)
2	12 (1.2%)
3	2 (0.2%)
SELECT_n_of_non_aggr_func___ROUND	
0	946 (95%)
1	53 (5.3%)
2	1 (0.1%)
SELECT_n_of_non_aggr_func___ABS	
0	940 (94%)
1	54 (5.4%)
2	6 (0.6%)
SELECT_n_of_non_aggr_func___TRUNC	
0	945 (95%)
1	49 (4.9%)
2	3 (0.3%)
3	3 (0.3%)
SELECT_n_of_all_non_aggr_func	[0.0, 2.0, 39.0] 3.4 / 4.4
SELECT_n_of_aggr_func___MIN	[0.00, 0.00, 10.00] 0.67 / 1.51
SELECT_n_of_aggr_func___COUNT	
0	775 (78%)
1	78 (7.8%)
2	35 (3.5%)
3	37 (3.7%)
4	30 (3.0%)
5	21 (2.1%)
6	15 (1.5%)
7	6 (0.6%)
8	3 (0.3%)
SELECT_n_of_aggr_func___COUNT_DISTINCT	[0.00, 0.00, 10.00] 0.61 / 1.43

Query parameter or value	Descriptive statistics
SELECT__n_of__aggr__func__MAX	
0	770 (77%)
1	76 (7.6%)
2	55 (5.5%)
3	30 (3.0%)
4	29 (2.9%)
5	16 (1.6%)
6	15 (1.5%)
7	7 (0.7%)
8	2 (0.2%)
SELECT__n_of__aggr__func__SUM	
0	941 (94%)
1	48 (4.8%)
2	9 (0.9%)
4	2 (0.2%)
SELECT__n_of__aggr__func__AVG	
0	941 (94%)
1	41 (4.1%)
2	12 (1.2%)
3	2 (0.2%)
4	4 (0.4%)
SELECT__n_of__all__aggr__func	[0.00, 2.00, 11.00] 2.72 / 2.34
FROM__n_of__join__paths	
1	321 (32%)
2	334 (33%)
3	345 (35%)
FROM__n_of__super__joins__LEFT	
0	761 (76%)
1	214 (21%)
2	25 (2.5%)
FROM__n_of__super__joins__FULL	
0	757 (76%)
1	225 (23%)
2	18 (1.8%)
FROM__n_of__super__joins__RIGHT	
0	788 (79%)
1	186 (19%)
2	26 (2.6%)
FROM__n_of__joins__INNER	
0	240 (24%)
1	267 (27%)
2	217 (22%)
3	149 (15%)
4	68 (6.8%)
5	35 (3.5%)
6	17 (1.7%)

Query parameter or value	Descriptive statistics
7	4 (0.4%)
8	3 (0.3%)
FROM_n_of_joins__RIGHT	
0	238 (24%)
1	263 (26%)
2	200 (20%)
3	161 (16%)
4	79 (7.9%)
5	32 (3.2%)
6	22 (2.2%)
7	3 (0.3%)
8	2 (0.2%)
FROM_n_of_processed_rows	[5, 6,810,616, 22,951,853] 6,391,220 / 6,045,202
WHERE_n_of_predicates	[0.00, 2.00, 10.00] 2.72 / 2.23
WHERE_n_of_attribs_of_type__character_varying	
0	452 (45%)
1	310 (31%)
2	152 (15%)
3	55 (5.5%)
4	28 (2.8%)
5	3 (0.3%)
WHERE_n_of_attribs_of_type__integer	
0	472 (47%)
1	304 (30%)
2	143 (14%)
3	59 (5.9%)
4	18 (1.8%)
5	4 (0.4%)
WHERE_n_of_attribs_of_type__numeric	
0	671 (67%)
1	246 (25%)
2	64 (6.4%)
3	14 (1.4%)
4	5 (0.5%)
WHERE_n_of_attribs_of_type__date	
0	841 (84%)
1	136 (14%)
2	21 (2.1%)
3	2 (0.2%)
WHERE_n_of_attribs_of_type__character	
0	753 (75%)
1	178 (18%)
2	57 (5.7%)
3	10 (1.0%)
4	2 (0.2%)
WHERE_n_of_pkey_attribs	

Query parameter or value	Descriptive statistics
0	646 (65%)
1	256 (26%)
2	79 (7.9%)
3	18 (1.8%)
4	1 (0.1%)
WHERE_n_of_connect_OR	
0	453 (45%)
1	181 (18%)
2	152 (15%)
3	87 (8.7%)
4	65 (6.5%)
5	38 (3.8%)
6	17 (1.7%)
7	6 (0.6%)
8	1 (0.1%)
WHERE_n_of_operators___greater_or_less	
0	436 (44%)
1	278 (28%)
2	166 (17%)
3	88 (8.8%)
4	26 (2.6%)
5	3 (0.3%)
6	2 (0.2%)
7	1 (0.1%)
WHERE_n_of_operators___like	
0	833 (83%)
1	150 (15%)
2	17 (1.7%)
WHERE_n_of_operators___between	
0	625 (63%)
1	265 (27%)
2	90 (9.0%)
3	15 (1.5%)
4	4 (0.4%)
5	1 (0.1%)
WHERE_n_of_operators___in	
0	632 (63%)
1	249 (25%)
2	87 (8.7%)
3	25 (2.5%)
4	7 (0.7%)
WHERE_n_of_non_aggr_func___DAY	
0	976 (98%)
1	23 (2.3%)
2	1 (0.1%)
WHERE_n_of_non_aggr_func___SQRT	

Query parameter or value	Descriptive statistics
0	916 (92%)
1	78 (7.8%)
2	6 (0.6%)
WHERE_n_of_non_aggr_func__DOW	
0	972 (97%)
1	28 (2.8%)
WHERE_n_of_non_aggr_func__FLOOR	
0	974 (97%)
1	26 (2.6%)
WHERE_n_of_non_aggr_func__LOG	
0	937 (94%)
1	62 (6.2%)
2	1 (0.1%)
WHERE_n_of_non_aggr_func__ABS	
0	980 (98%)
1	20 (2.0%)
WHERE_n_of_non_aggr_func__TRUNC	
0	969 (97%)
1	31 (3.1%)
WHERE_n_of_non_aggr_func__ROUND	
0	978 (98%)
1	22 (2.2%)
WHERE_n_of_non_aggr_func__MONTH	
0	978 (98%)
1	22 (2.2%)
WHERE_n_of_non_aggr_func__YEAR	
0	976 (98%)
1	24 (2.4%)
WHERE_n_of_all_non_aggr_func	
0	721 (72%)
1	216 (22%)
2	55 (5.5%)
3	7 (0.7%)
5	1 (0.1%)
GROUP_BY_n_of_columns	[0.00, 2.00, 9.00] 2.32 / 2.09
HAVING_n_of_main_predicates	[0.00, 3.00, 9.00] 3.24 / 2.56
HAVING_n_of_main_predicates__non_scalar_subquery	
0	453 (45%)
1	196 (20%)
2	168 (17%)
3	183 (18%)
HAVING_n_of_main_predicates__scalar_subquery	
0	464 (46%)
1	181 (18%)
2	180 (18%)
3	175 (18%)

Query parameter or value	Descriptive statistics
HAVING_n_of_subqueries__non_scalar_subquery	
0	453 (45%)
1	196 (20%)
2	168 (17%)
3	183 (18%)
HAVING_n_of_subqueries__scalar_subquery	[0.0, 1.0, 22.0] 2.3 / 3.6
HAVING_n_of_processed_rows_by_subquery	[0, 2,735,038, 386,132,364] 22,326,715 / 43,021,125
ORDER_BY_n_of_columns	
0	298 (30%)
1	377 (38%)
2	245 (25%)
3	48 (4.8%)
4	14 (1.4%)
5	13 (1.3%)
6	3 (0.3%)
7	2 (0.2%)
limit	[2, 493, 1,000] 494 / 286
offset	[0, 11, 999] 247 / 315