

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

## Scenario: 1-3jp\_ujpp\_\_g\_\_h0-3ss\_h0nss

## Scale factor: 0.01 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, 6, 95] 10 / 13
SELECT_n_of_non_aggr_func__RTRIM	
0	694 (69%)
1	236 (24%)
2	37 (3.7%)
3	21 (2.1%)
4	10 (1.0%)
6	2 (0.2%)
SELECT_n_of_non_aggr_func__UPPER	
0	694 (69%)
1	237 (24%)
2	49 (4.9%)
3	11 (1.1%)
4	5 (0.5%)
5	3 (0.3%)

Query parameter or value	Descriptive statistics
7	1 (0.1%)
SELECT_n_of_non_aggr_func__LOWER	
0	677 (68%)
1	257 (26%)
2	45 (4.5%)
3	13 (1.3%)
4	7 (0.7%)
6	1 (0.1%)
SELECT_n_of_non_aggr_func__SQRT	
0	850 (85%)
1	110 (11%)
2	22 (2.2%)
3	14 (1.4%)
4	3 (0.3%)
5	1 (0.1%)
SELECT_n_of_non_aggr_func__DAY	
0	909 (91%)
1	76 (7.6%)
2	11 (1.1%)
3	2 (0.2%)
4	2 (0.2%)
SELECT_n_of_non_aggr_func__LOG	
0	895 (90%)
1	87 (8.7%)
2	17 (1.7%)
3	1 (0.1%)
SELECT_n_of_non_aggr_func__MONTH	
0	849 (85%)
1	119 (12%)
2	18 (1.8%)
3	7 (0.7%)
4	4 (0.4%)
5	2 (0.2%)
6	1 (0.1%)
SELECT_n_of_non_aggr_func__SUBSTR	
0	703 (70%)
1	218 (22%)
2	59 (5.9%)
3	11 (1.1%)
4	4 (0.4%)
5	4 (0.4%)
6	1 (0.1%)
SELECT_n_of_non_aggr_func__LTRIM	
0	679 (68%)
1	232 (23%)
2	68 (6.8%)

Query parameter or value	Descriptive statistics
3	16 (1.6%)
4	1 (0.1%)
5	3 (0.3%)
6	1 (0.1%)
SELECT__n_of__non_aggr_func__DOW	
0	892 (89%)
1	86 (8.6%)
2	16 (1.6%)
3	4 (0.4%)
5	2 (0.2%)
SELECT__n_of__non_aggr_func__FLOOR	
0	951 (95%)
1	47 (4.7%)
2	2 (0.2%)
SELECT__n_of__non_aggr_func__YEAR	
0	860 (86%)
1	100 (10%)
2	24 (2.4%)
3	11 (1.1%)
4	3 (0.3%)
5	1 (0.1%)
6	1 (0.1%)
SELECT__n_of__non_aggr_func__TRUNC	
0	940 (94%)
1	52 (5.2%)
2	6 (0.6%)
3	1 (0.1%)
5	1 (0.1%)
SELECT__n_of__non_aggr_func__ABS	
0	942 (94%)
1	55 (5.5%)
2	3 (0.3%)
SELECT__n_of__non_aggr_func__ROUND	
0	944 (94%)
1	50 (5.0%)
2	5 (0.5%)
3	1 (0.1%)
SELECT__n_of__all__non_aggr_func	[0.0, 2.0, 39.0] 3.4 / 4.8
SELECT__n_of__aggr_func__COUNT_DISTINCT	[0.00, 0.00, 9.00] 0.70 / 1.56
SELECT__n_of__aggr_func__MAX	[0.00, 0.00, 10.00] 0.70 / 1.59
SELECT__n_of__aggr_func__AVG	
0	931 (93%)
1	54 (5.4%)
2	14 (1.4%)
3	1 (0.1%)
SELECT__n_of__aggr_func__MIN	[0.00, 0.00, 10.00] 0.65 / 1.45

Query parameter or value	Descriptive statistics
SELECT__n_of__aggr__func__COUNT	
0	784 (78%)
1	86 (8.6%)
2	45 (4.5%)
3	26 (2.6%)
4	20 (2.0%)
5	14 (1.4%)
6	14 (1.4%)
7	8 (0.8%)
8	3 (0.3%)
SELECT__n_of__aggr__func__SUM	
0	938 (94%)
1	40 (4.0%)
2	17 (1.7%)
3	5 (0.5%)
SELECT__n_of__all__aggr__func	[0.00, 2.00, 12.00] 2.80 / 2.36
FROM__n_of__join__paths	
1	321 (32%)
2	318 (32%)
3	361 (36%)
FROM__n_of__super__joins__FULL	
0	763 (76%)
1	214 (21%)
2	23 (2.3%)
FROM__n_of__super__joins__RIGHT	
0	754 (75%)
1	210 (21%)
2	36 (3.6%)
FROM__n_of__super__joins__LEFT	
0	763 (76%)
1	211 (21%)
2	26 (2.6%)
FROM__n_of__joins__INNER	
0	227 (23%)
1	273 (27%)
2	215 (22%)
3	136 (14%)
4	81 (8.1%)
5	47 (4.7%)
6	13 (1.3%)
7	5 (0.5%)
8	3 (0.3%)
FROM__n_of__joins__RIGHT	
0	245 (25%)
1	228 (23%)
2	238 (24%)

Query parameter or value	Descriptive statistics
3	146 (15%)
4	82 (8.2%)
5	41 (4.1%)
6	13 (1.3%)
7	6 (0.6%)
8	1 (0.1%)
FROM_n_of_processed_rows	[5, 68,305, 230,025] 64,960 / 60,434
WHERE_n_of_predicates	[0.00, 2.00, 10.00] 2.80 / 2.24
WHERE_n_of_attribs_of_type__character	
0	735 (74%)
1	204 (20%)
2	50 (5.0%)
3	10 (1.0%)
4	1 (0.1%)
WHERE_n_of_attribs_of_type__integer	
0	436 (44%)
1	331 (33%)
2	159 (16%)
3	59 (5.9%)
4	10 (1.0%)
5	4 (0.4%)
6	1 (0.1%)
WHERE_n_of_attribs_of_type__character_varying	
0	450 (45%)
1	297 (30%)
2	155 (16%)
3	69 (6.9%)
4	23 (2.3%)
5	6 (0.6%)
WHERE_n_of_attribs_of_type__date	
0	839 (84%)
1	130 (13%)
2	26 (2.6%)
3	5 (0.5%)
WHERE_n_of_attribs_of_type__numeric	
0	672 (67%)
1	243 (24%)
2	65 (6.5%)
3	18 (1.8%)
4	2 (0.2%)
WHERE_n_of_pkey_attribs	
0	623 (62%)
1	290 (29%)
2	72 (7.2%)
3	14 (1.4%)
4	1 (0.1%)

Query parameter or value	Descriptive statistics
WHERE_n_of_connect_OR	
0	466 (47%)
1	176 (18%)
2	122 (12%)
3	102 (10%)
4	67 (6.7%)
5	43 (4.3%)
6	18 (1.8%)
7	5 (0.5%)
8	1 (0.1%)
WHERE_n_of_operators___greater_or_less	
0	404 (40%)
1	303 (30%)
2	183 (18%)
3	73 (7.3%)
4	29 (2.9%)
5	7 (0.7%)
6	1 (0.1%)
WHERE_n_of_operators___in	
0	629 (63%)
1	257 (26%)
2	95 (9.5%)
3	17 (1.7%)
4	2 (0.2%)
WHERE_n_of_operators___between	
0	594 (59%)
1	280 (28%)
2	103 (10%)
3	20 (2.0%)
4	2 (0.2%)
5	1 (0.1%)
WHERE_n_of_operators___like	
0	824 (82%)
1	159 (16%)
2	17 (1.7%)
WHERE_n_of_non_aggr_func___LOG	
0	935 (94%)
1	62 (6.2%)
2	3 (0.3%)
WHERE_n_of_non_aggr_func___ROUND	
0	972 (97%)
1	28 (2.8%)
WHERE_n_of_non_aggr_func___DOW	
0	967 (97%)
1	33 (3.3%)
WHERE_n_of_non_aggr_func___SQRT	

Query parameter or value	Descriptive statistics
0	906 (91%)
1	89 (8.9%)
2	5 (0.5%)
WHERE_n_of_non_aggr_func__ABS	
0	967 (97%)
1	32 (3.2%)
2	1 (0.1%)
WHERE_n_of_non_aggr_func__FLOOR	
0	972 (97%)
1	27 (2.7%)
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__DAY	
0	973 (97%)
1	26 (2.6%)
2	1 (0.1%)
WHERE_n_of_non_aggr_func__TRUNC	
0	975 (98%)
1	24 (2.4%)
2	1 (0.1%)
WHERE_n_of_non_aggr_func__MONTH	
0	970 (97%)
1	29 (2.9%)
2	1 (0.1%)
WHERE_n_of_all_non_aggr_func	
0	698 (70%)
1	224 (22%)
2	62 (6.2%)
3	14 (1.4%)
4	1 (0.1%)
5	1 (0.1%)
GROUP_BY_n_of_columns	[0.00, 2.00, 11.00] 2.35 / 2.07
HAVING_n_of_main_predicates	
0	287 (29%)
1	83 (8.3%)
2	166 (17%)
3	187 (19%)
4	134 (13%)
5	89 (8.9%)
6	54 (5.4%)
HAVING_n_of_main_predicates__scalar_subquery	
0	414 (41%)
1	216 (22%)

Query parameter or value	Descriptive statistics
2	187 (19%)
3	183 (18%)
HAVING_n_of_subqueries__scalar_subquery	[0.0, 1.0, 25.0] 2.5 / 3.6
HAVING_n_of_processed_rows_by_subqueries	[0, 3,365, 2,147,250] 147,846 / 323,195
ORDER_BY_n_of_columns	
0	271 (27%)
1	385 (39%)
2	244 (24%)
3	74 (7.4%)
4	18 (1.8%)
5	2 (0.2%)
6	5 (0.5%)
7	1 (0.1%)
limit	[1, 495, 1,000] 502 / 290
offset	[0, 0, 1,000] 266 / 337