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

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## Scenario: 1-3jp_rjjp__g_hOss_hOnss

## Scale factor: 100 GB

## The 1000-query pack was generated on: 2023-11-10

## 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
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Query parameter or value	Descriptive statistics	
SELECT_n_of_columns	[1, 6, 90] 10 / 13	
SELECT_n_of_non_aggr_funcSUBSTR		
0	712 (71%)	
1	$226\ (23\%)$	
2	48 (4.8%)	
3	6~(0.6%)	
4	5~(0.5%)	
5	1~(0.1%)	
6	2~(0.2%)	
SELECT_n_of_non_aggr_funcUPPER		
0	669~(67%)	
1	255~(26%)	
2	52 (5.2%)	
3	14 (1.4%)	
4	8 (0.8%)	

Query parameter or value	Descriptive statistics
5	1 (0.1%)
7	1 (0.1%)
SELECT_n_of_non_aggr_funcLOG	,
0	906 (91%)
1	80 (8.0%)
2	10 (1.0%)
3	4~(0.4%)
SELECT_n_of_non_aggr_funcRTRIM	
0	661~(66%)
1	264~(26%)
2	$53\ (5.3\%)$
3	$16 \ (1.6\%)$
4	4~(0.4%)
6	2~(0.2%)
SELECT_n_of_non_aggr_funcSQRT	
0	874 (87%)
1	$95 \; (9.5\%)$
2	18 (1.8%)
3	6~(0.6%)
4	6 (0.6%)
5	1~(0.1%)
SELECT_n_of_non_aggr_funcYEAR	272 (224)
0	856 (86%)
1	116 (12%)
2	18 (1.8%)
3	4 (0.4%)
4	4 (0.4%)
5	1 (0.1%)
	1~(0.1%)
SELECT_n_of_non_aggr_funcDOW	000 (0007)
0	882 (88%)
1	102 (10%)
2 3	13 (1.3%)
	2 (0.2%)
4 SELECT_n_of_non_aggr_funcFLOOR	1 (0.1%)
0	953 (95%)
1	44 (4.4%)
2	3 (0.3%)
SELECT_n_of_non_aggr_funcMONTH	3 (0.370)
0	838 (84%)
1	123 (12%)
2	27 (2.7%)
3	6 (0.6%)
4	3 (0.3%)
<i>5</i>	2(0.2%)
	2 (0.270)

Query parameter or value	Descriptive statistics
6	1 (0.1%)
SELECT_n_of_non_aggr_funcLTRIM	
0	719 (72%)
1	205 (21%)
2	55~(5.5%)
3	$13 \ (1.3\%)$
4	4~(0.4%)
5	2~(0.2%)
6	2~(0.2%)
SELECT_n_of_non_aggr_funcTRUNC	
0	934~(93%)
1	59 (5.9%)
2	6~(0.6%)
3	1 (0.1%)
SELECT_n_of_non_aggr_funcLOWER	
0	701 (70%)
1	234~(23%)
2	$45 \ (4.5\%)$
3	11 (1.1%)
4	3~(0.3%)
5	3~(0.3%)
6	2~(0.2%)
7	1~(0.1%)
SELECT_n_of_non_aggr_funcROUND	
θ	957 (96%)
1	41 (4.1%)
2	2~(0.2%)
SELECT_n_of_non_aggr_funcDAY	
0	912 (91%)
1	78 (7.8%)
2	9~(0.9%)
3	1~(0.1%)
SELECT_n_of_non_aggr_funcABS	
0	946 (95%)
1	53 (5.3%)
2	1~(0.1%)
SELECT_n_of_all_non_aggr_func	[0.0, 2.0, 41.0] 3.2 / 4.5
SELECT_n_of_aggr_funcCOUNT	[0.00, 0.00, 9.00] 0.65 / 1.43
SELECT_n_of_aggr_funcCOUNT_DISTINCT	[0.00, 0.00, 9.00] 0.65 / 1.46
SELECT_n_of_aggr_funcMIN SELECT_n_of_aggr_funcAVG	[0.00,0.00,9.00]0.65/1.45
0	934 (93%)
1	39 (3.9%)
2	$22\ (2.2\%)$
3	$2\;(0.2\%)$
4	2(0.2%)

5 1 (0.1%) SELECT_n_of_aggr_fune_MAX [0.00, 0.00, 9.00] 0.60 / 1.38 SELECT_n_of_aggr_fune_SUM 945 (95%) 1 35 (3.5%) 2 16 (1.6%) 3 3 (0.3%) 4 1 (0.1%) SELECT_n_of_all_aggr_fune [0.00, 2.00, 10.00] 2.73 / 2.29 FROM_n_of_join_paths 301 (30%) 2 349 (35%) 3 350 (35%) FROM_n_of_super_joins_RIGHT 772 (77%) 0 772 (77%) 1 206 (21%) 2 2 (2.2%) FROM_n_of_super_joins_LEFT 738 (74%) 1 233 (23%) 2 29 (2.9%) FROM_n_of_super_joins_FULL 802 (80%) 1 181 (18%) 2 17 (1.7%) FROM_n_of_joins_INNER 224 (22%) 1 266 (27%) 2 220 (22%) 3 148 (15%) 4 87 (8.7%) 5 37 (3.7%) 6 14 (1.4%) <th>Query parameter or value</th> <th>Descriptive statistics</th>	Query parameter or value	Descriptive statistics
SELECT n of aggr func MAX [0.00, 0.00, 9.00] 0.60 / 1.38 SELECT_n of aggr func SUM 945 (95%) 1 35 (3.5%) 2 16 (1.6%) 3 3 (0.3%) 4 1 (0.1%) SELECT n of all aggr func [0.00, 2.00, 10.00] 2.73 / 2.29 FROM_n of join paths 301 (30%) 2 349 (35%) 3 3350 (35%) FROM_n of super joins RIGHT 772 (77%) 1 206 (21%) 2 22 (2.2%) FROM_n of super joins LEFT 802 (80%) 1 802 (80%) 1 802 (80%) 1 266 (27%) 2 220 (22%) 3 148 (15%) 4 87 (8.7%) 5 37 (3.7%) 6 14 (1.4%) 7 40.4%) FROM_n of joins_RIGHT 235 (24%) 1 260 (27%) 2 220 (22%) 3 147 (1.4%) 4 0.6%) 5 <td>5</td> <td>1 (0.1%)</td>	5	1 (0.1%)
SELECT_nof_aggr_fune_SUM 945 (95%) 1 35 (3.5%) 2 16 (1.6%) 3 3 (0.3%) 4 1 (0.1%) SELECT_n_of_all_aggr_fune [0.00, 2.00, 10.00] 2.73 / 2.29 FROM_n_of_join_paths 301 (30%) 2 349 (35%) 3 350 (35%) FROM_n of_super_joins_RIGHT 772 (77%) 6 772 (77%) 1 206 (21%) 2 2 (2.2%) FROM_n of_super_joins_LEFT 738 (74%) 1 233 (23%) 2 29 (2.9%) FROM_n of_super_joins_FULL 802 (80%) 1 181 (18%) 2 17 (1.7%) FROM_n of_joins_INNER 224 (22%) 1 266 (27%) 2 222 (22%) 3 148 (15%) 4 87 (8.7%) 5 37 (3.7%) 6 14 (1.4%) 7 235 (24%) 1 147 (15%) 4 26		, ,
0 945 (95%) 1 35 (3.5%) 2 16 (1.6%) 3 3 (0.3%) 4 1 (0.1%) SELECT n of all aggr_func [0.00, 2.00, 10.00] 2.73 / 2.29 FROM_nof_join_paths 1 301 (30%) 2 349 (35%) 3 350 (35%) FROM_nof_super_joins_RIGHT 0 772 (77%) 1 206 (21%) 2 22 (2.2%) FROM_nof_super_joins_LEFT 0 738 (74%) 1 233 (23%) 2 29 (2.9%) FROM_nof_super_joins_FULL 0 802 (80%) 1 181 (18%) 2 17 (1.7%) FROM_nof_joins_INNER 0 24 (22%) 2 220 (22%) 3 148 (15%) 4 87 (8.7%) 5 37 (3.7%) 6 14 (1.4%) 7 267 (27%) 2 196 (20%) 3 147 (15	==	, , , , , , , , , , , , , , , , , , ,
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		945~(95%)
2	1	· /
3 (0.3%) 4 1 (0.1%) SELECT_n_of_all_aggr_func [0.00, 2.00, 10.00] 2.73 / 2.29 FROM_n_of_join_paths 1 301 (30%) 2 349 (35%) 3 50 (35%) FROM_n_of_super_joins_RIGHT 0 772 (77%) 1 206 (21%) 2 20 (2.2%) FROM_n_of_super_joinsLEFT 0 738 (74%) 1 233 (23%) 2 29 (2.9%) FROM_n_of_super_joins_FULL 0 802 (80%) 1 181 (18%) 2 17 (1.7%) FROM_n_of_joins_INNER 0 224 (22%) 1 266 (27%) 2 220 (22%) 3 148 (15%) 4 87 (8.7%) 5 37 (3.7%) 6 14 (1.4%) 7 4 (0.4%) FROM_n_of_joins_RIGHT 0 235 (24%) 1 267 (27%) 2 196 (20%) 3 44 (9.4%) 5 42 (4.2%) 6 12 (1.2%) 7 FROM_n_of_processed_rows [5, 681,037,932, 2,295,113,706] 647,143,316 / 553,811,107	2	· ,
SELECT_n_of_all_aggr_func [0.00, 2.00, 10.00] 2.73 / 2.29 FROM_n_of_join_paths 301 (30%) 2 349 (35%) 350 (35%) 350 (35%) FROM_n_of_super_joins_RIGHT 772 (77%) 0 772 (77%) 1 206 (21%) 2 22 (2.2%) FROM_n_of_super_joins_LEFT 738 (74%) 0 738 (74%) 1 233 (23%) 2 2.9%) FROM_n_of_super_joins_FULL 802 (80%) 0 802 (80%) 1 181 (18%) 2 224 (22%) 1 266 (27%) 2 220 (22%) 3 148 (15%) 4 4 (14%) 7 4 (04%) FROM_n_of_joins_RIGHT 235 (24%) 0 235 (24%) 1 267 (27%) 2 196 (20%) 3 147 (15%) 4 96 (9.6%) 5 42 (4.2%) 6 12 (1.2%) 7 5 (0.5%) 5 (5, 681,	3	· ,
SELECT_n_of_all_aggr_func [0.00, 2.00, 10.00] 2.73 / 2.29 FROM_n_of_join_paths 301 (30%) 2 349 (35%) 3 350 (35%) FROM_n_of_super_joins_RIGHT 772 (77%) 0 772 (77%) 1 206 (21%) 2 22 (2.2%) FROM_n_of_super_joins_LEFT 738 (74%) 0 738 (74%) 1 233 (23%) 2 2 (2.9%) FROM_n_of_super_joins_FULL 802 (80%) 1 181 (18%) 2 2 (20%) 5 224 (22%) 1 266 (27%) 2 220 (22%) 3 37 (3.7%) 6 14 (1.4%) 7 4 (0.4%) FROM_n_of_joins_RIGHT 235 (24%) 1 267 (27%) 2 196 (20%) 3 147 (15%) 4 96 (9.6%) 5 42 (4.2%) 6 12 (1.2%) 7 5 (0.5%)	4	1 (0.1%)
FROM_n_of_join_paths 1		
2 349 (35%) 3 50 (35%) FROM_n_of_super_joins_RIGHT 0 772 (77%) 1 206 (21%) 2 22 (2.2%) FROM_n_of_super_joins_LEFT 0 738 (74%) 1 233 (23%) 2 29 (2.9%) FROM_n_of_super_joins_FULL 0 802 (80%) 1 181 (18%) 2 17 (1.7%) FROM_n_of_joins_INNER 0 224 (22%) 1 181 (15%) 4 266 (27%) 2 220 (22%) 3 148 (15%) 4 87 (8.7%) 5 37 (3.7%) 6 14 (1.4%) 7 4 (0.4%) FROM_n_of_joins_RIGHT 0 235 (24%) 1 267 (27%) 2 196 (20%) 3 147 (1.5%) 4 96 (9.6%) 5 42 (4.2%) 6 12 (1.2%) 7 FROM_n_of_processed_rows [5, 681,037,932, 2295,113,706] 647,143,316 / 593,811,107		, , ,
3 350 (35%) FROM_n_of_super_joins_RIGHT 772 (77%) 0 72 (27%) 206 (21%) 2 22 (2.2%) 22 (2.2%) FROM_n_of_super_joins_LEFT 738 (74%) 0 738 (74%) 29 (2.9%) FROM_n_of_super_joins_FULL 802 (80%) 0 80 (80%) 181 (18%) 1 181 (18%) 17 (1.7%) FROM_n_of_joins_INNER 224 (22%) 1 2 266 (27%) 22 220 (22%) 3 148 (15%) 4 4 87 (8.7%) 37 (3.7%) 6 14 (1.4%) 4 (0.4%) FROM_n_of_joins_RIGHT 235 (24%) 1 2 (27%) 2 2 196 (20%) 147 (15%) 4 96 (9.6%) 42 (4.2%) 6 12 (1.2%) 5 (0.5%) FROM_n_of_processed_rows [5, 681,037,932, 2.295,113,706] 647,143,316 / 593,811,107	1	301 (30%)
FROM_n_of_super_joinsRIGHT 0	2	$349 \ (35\%)$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	3	$350\ (35\%)$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	FROM_n_of_super_joinsRIGHT	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	θ	772 (77%)
FROM_n_of_super_joinsLEFT 0	1	206~(21%)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2	$22\ (2.2\%)$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	FROM_n_of_super_joinsLEFT	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	θ	$738 \ (74\%)$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1	$233\ (23\%)$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2	29~(2.9%)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	FROM_n_of_super_joinsFULL	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0	802 (80%)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1	181 (18%)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2	17 (1.7%)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	FROM_n_of_joinsINNER	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0	224~(22%)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1	266~(27%)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2	220~(22%)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	3	$148 \ (15\%)$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	4	87 (8.7%)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	5	37 (3.7%)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	6	$14 \ (1.4\%)$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	7	4~(0.4%)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	FROM_n_of_joinsRIGHT	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0	· · · · · · · · · · · · · · · · · · ·
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1	,
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2	· · · · · · · · · · · · · · · · · · ·
5 42 (4.2%) 6 12 (1.2%) 7 5 (0.5%) FROM_n_of_processed_rows [5, 681,037,932, 2,295,113,706] 647,143,316 / 593,811,107	3	$147 \ (15\%)$
6 12 (1.2%) 7 5 (0.5%) FROM_n_of_processed_rows [5, 681,037,932, 2,295,113,706] 647,143,316 / 593,811,107	4	96~(9.6%)
7	5	42 (4.2%)
FROM_n_of_processed_rows [5, 681,037,932, 2,295,113,706] 647,143,316 / 593,811,107	6	,
593,811,107	7	,
	FROM_n_of_processed_rows	
WHERE_ii_oi_predicates [0.00, 5.00, 9.00] 2.31 / 2.11	WHERE_n_of_predicates	[0.00, 3.00, 9.00] 2.81 / 2.11

WHERE_n_of_attribs_of_typecharacter_varying 0	Query parameter or value	Descriptive statistics
1 312 (31%) 2 167 (17%) 3 72 (7.2%) 4 17 (1.7%) 5 2 (0.2%) WHERE n of attribs of type integer 0 461 (46%) 1 320 (32%) 2 141 (14%) 3 58 (5.8%) 4 16 (1.6%) 5 58 (5.8%) 4 40.4%) WHERE_n of_attribs_of_typenumeric 620 (62%) 0 620 (62%) 1 299 (30%) 2 299 (30%) 2 20.2%) WHERE_n of_attribs_of_typecharacter 724 (72%) 0 724 (72%) 1 228 (23%) 2 39 (3.9%) 3 9 (0.9%) WHERE_n_of_attribs_of_typedate 822 (82%) 1 157 (16%) 2 20 (2.0%) 3 1 (0.1%) WHERE_n_of_pkey_attribs 634 (63%) 1 271 (27%) 2 76 (7.6%) 3 16 (1.6%)	WHERE_n_of_attribs_of_typecharacter_varyin	g
2	0	$430 \ (43\%)$
3 72 (7.2%) 4 17 (1.7%) 5 2 (0.2%) WHERE_n_of_attribs_of_typeinteger 0 461 (46%) 1 320 (32%) 2 141 (14%) 3 58 (5.8%) 4 16 (1.6%) 5 4 (0.4%) WHERE_n_of_attribs_of_typenumeric 620 (62%) 1 299 (30%) 2 64 (6.4%) 3 15 (1.5%) 4 20.2%) WHERE_n_of_attribs_of_typecharacter 724 (72%) 1 228 (23%) 2 39 (3.9%) 3 9 (0.9%) WHERE_n_of_attribs_of_typedate 822 (82%) 1 157 (16%) 2 20 (2.0%) 3 1 (0.1%) WHERE_n_of_pkey_attribs 634 (63%) 1 271 (27%) 2 76 (7.6%) 3 16 (1.6%) 4 2 (0.2%) 5 10 (11%) WHERE_n_of_connect_OR 434 (43%) 1 194 (19%) <td>1</td> <td>312 (31%)</td>	1	312 (31%)
## To the content of	2	167 (17%)
5 2 (0.2%) WHERE_n_of_attribs_of_typeinteger 461 (46%) 1 320 (32%) 2 141 (14%) 3 58 (5.8%) 4 16 (1.6%) 5 4 (0.4%) WHERE_n_of_attribs_of_typenumeric 620 (62%) 0 299 (30%) 2 299 (30%) 2 299 (30%) 2 20,02%) WHERE_n_of_attribs_of_typecharacter 724 (72%) 1 228 (23%) 2 39 (3.9%) 3 9 (0.9%) WHERE_n_of_attribs_of_typedate 822 (82%) 1 157 (16%) 2 20 (2.0%) 3 1 (0.1%) WHERE_n_of_pkey_attribs 634 (63%) 1 271 (27%) 2 76 (7.6%) 3 16 (1.6%) 4 2 (0.2%) 5 1 (0.1%) WHERE_n of_connect_OR 434 (43%) 1 194 (19%) 2 148 (15%) 3 149 (19%) 4 <td< td=""><td>3</td><td>72 (7.2%)</td></td<>	3	72 (7.2%)
WHERE_n_of_attribs_of_typeinteger 0	4	17 (1.7%)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	5	2~(0.2%)
1 320 (32%) 2 141 (14%) 3 58 (5.8%) 4 16 (1.6%) 5 4 (0.4%) WHERE_n_of_attribs_of_typenumeric 0 620 (62%) 1 299 (30%) 2 64 (6.4%) 3 15 (1.5%) 4 2 (0.2%) WHERE_n_of_attribs_of_typecharacter 724 (72%) 1 228 (23%) 2 39 (3.9%) 3 9 (0.9%) WHERE_n_of_attribs_of_typedate 822 (82%) 1 157 (16%) 2 20 (2.0%) 3 1 (0.1%) WHERE_n_of_pkey_attribs 6 0 634 (63%) 1 271 (27%) 2 76 (7.6%) 3 16 (1.6%) 4 2 (0.2%) 5 1 (0.1%) WHERE_n_of_connect_OR 434 (43%) 4 2 (0.2%) 5 1 (0.1%) WHERE_n_of_connect_OR 434 (43%) 4 2 (0.2%)	$WHERE_n_of_attribs_of_type__integer$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0	461~(46%)
3 58 (5.8%) 4 16 (1.6%) 5 4 (0.4%) WHERE n of attribs of type numeric 0 620 (62%) 1 299 (30%) 2 64 (6.4%) 3 15 (1.5%) 4 2 (0.2%) WHERE n of attribs of type character 724 (72%) 1 228 (23%) 2 39 (3.9%) 3 9 (0.9%) WHERE n of attribs of type date 822 (82%) 1 157 (16%) 2 20 (2.0%) 3 1 (0.1%) WHERE n of pkey attribs 634 (63%) 1 271 (27%) 2 76 (7.6%) 3 16 (1.6%) 4 2 (0.2%) 5 1 (0.1%) WHERE n of connect OR 434 (43%) 0 434 (43%) 1 194 (19%) 2 148 (15%) 3 112 (11%) 4 58 (5.8%) 5 33 (3.3%) 6 16 (1.6%)	1	$320 \ (32\%)$
4 16 (1.6%) 5 4 (0.4%) WHERE_n_of_attribs_of_typenumeric 0 620 (62%) 1 299 (30%) 2 99 (30%) 2 64 (6.4%) 3 15 (1.5%) 4 2 (0.2%) WHERE_n_of_attribs_of_typecharacter 0 724 (72%) 1 228 (23%) 2 39 (3.9%) 3 9 (0.9%) WHERE_n_of_attribs_of_typedate 0 822 (82%) 1 157 (16%) 2 20 (2.0%) 3 1 (0.1%) WHERE_n_of_pkey_attribs 0 634 (63%) 1 271 (27%) 2 76 (7.6%) 3 16 (1.6%) 4 2 (0.2%) 5 1 (0.1%) WHERE_n_of_connect_OR 0 434 (43%) 1 194 (19%) 2 148 (15%) 3 112 (11%) 4 58 (5.8%) 5 33 (3.3%) 6 6 16 (1.6%)	2	141 (14%)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	3	58 (5.8%)
5 4 (0.4%) WHERE_n_of_attribs_of_typenumeric 620 (62%) 0 299 (30%) 2 64 (6.4%) 3 15 (1.5%) 4 2 (0.2%) WHERE_n_of_attribs_of_typecharacter 724 (72%) 1 228 (23%) 2 39 (3.9%) 3 9 (0.9%) WHERE_n_of_attribs_of_typedate 822 (82%) 1 157 (16%) 2 20 (2.0%) 3 1 (0.1%) WHERE_n_of_pkey_attribs 634 (63%) 1 271 (27%) 2 76 (7.6%) 3 16 (1.6%) 4 2 (0.2%) 5 1 (0.1%) WHERE_n_of_connect_OR 434 (43%) 0 434 (43%) 1 194 (19%) 2 148 (15%) 3 112 (11%) 4 5 (5.5%) 5 33 (3.3%) 6 16 (1.6%)	4	$16 \ (1.6\%)$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		4~(0.4%)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	WHERE_n_of_attribs_of_typenumeric	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0	620~(62%)
3 15 (1.5%) 4 2 (0.2%) WHERE_n_of_attribs_of_typecharacter 0 724 (72%) 1 228 (23%) 2 39 (3.9%) 3 9 (0.9%) WHERE_n_of_attribs_of_typedate 0 822 (82%) 1 157 (16%) 2 20 (2.0%) 3 1 (0.1%) WHERE_n_of_pkey_attribs 634 (63%) 1 271 (27%) 2 76 (7.6%) 3 16 (1.6%) 4 2 (0.2%) 5 1 (0.1%) WHERE_n_of_connect_OR 434 (43%) 1 194 (19%) 2 148 (15%) 3 112 (11%) 4 58 (5.8%) 5 33 (3.3%) 6 16 (1.6%)	1	299 (30%)
WHERE_n_of_attribs_of_typecharacter 0	2	64 (6.4%)
WHERE_n_of_attribs_of_typecharacter 0	3	15(1.5%)
$\begin{array}{llllllllllllllllllllllllllllllllllll$	4	2~(0.2%)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0	724 (72%)
3 9 (0.9%) WHERE_n_of_attribs_of_typedate 822 (82%) 1 157 (16%) 2 20 (2.0%) 3 1 (0.1%) WHERE_n_of_pkey_attribs 634 (63%) 1 271 (27%) 2 76 (7.6%) 3 16 (1.6%) 4 2 (0.2%) 5 1 (0.1%) WHERE_n_of_connect_OR 434 (43%) 1 194 (19%) 2 148 (15%) 3 112 (11%) 4 58 (5.8%) 5 33 (3.3%) 6 16 (1.6%)	1	228 (23%)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2	$39 \; (3.9\%)$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	3	9 (0.9%)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	WHERE_n_of_attribs_of_typedate	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0	822 (82%)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1	157 (16%)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2	$20 \ (2.0\%)$
0 634 (63%) 1 271 (27%) 2 76 (7.6%) 3 16 (1.6%) 4 2 (0.2%) 5 1 (0.1%) WHERE_n_of_connect_OR 434 (43%) 1 194 (19%) 2 148 (15%) 3 112 (11%) 4 58 (5.8%) 5 33 (3.3%) 6 16 (1.6%)	3	1~(0.1%)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$WHERE_n_of_pkey_attribs$	
2 76 (7.6%) 3 16 (1.6%) 4 2 (0.2%) 5 1 (0.1%) WHERE_n_of_connect_OR 434 (43%) 0 434 (19%) 2 148 (15%) 3 112 (11%) 4 58 (5.8%) 5 33 (3.3%) 6 16 (1.6%)	0	634~(63%)
3 16 (1.6%) 4 2 (0.2%) 5 1 (0.1%) WHERE_n_of_connect_OR 434 (43%) 0 434 (19%) 2 148 (15%) 3 112 (11%) 4 58 (5.8%) 5 33 (3.3%) 6 16 (1.6%)	1	271 (27%)
4 2 (0.2%) 5 1 (0.1%) WHERE_n_of_connect_OR 434 (43%) 0 434 (19%) 1 194 (19%) 2 148 (15%) 3 112 (11%) 4 58 (5.8%) 5 33 (3.3%) 6 16 (1.6%)	2	$76 \ (7.6\%)$
5 1 (0.1%) WHERE_n_of_connect_OR 434 (43%) 0 434 (19%) 2 148 (15%) 3 112 (11%) 4 58 (5.8%) 5 33 (3.3%) 6 16 (1.6%)	3	$16 \ (1.6\%)$
5 1 (0.1%) WHERE_n_of_connect_OR 434 (43%) 1 194 (19%) 2 148 (15%) 3 112 (11%) 4 58 (5.8%) 5 33 (3.3%) 6 16 (1.6%)	4	2~(0.2%)
0 434 (43%) 1 194 (19%) 2 148 (15%) 3 112 (11%) 4 58 (5.8%) 5 33 (3.3%) 6 16 (1.6%)	5	1~(0.1%)
1 194 (19%) 2 148 (15%) 3 112 (11%) 4 58 (5.8%) 5 33 (3.3%) 6 16 (1.6%)	WHERE_n_of_connect_OR	
2 148 (15%) 3 112 (11%) 4 58 (5.8%) 5 33 (3.3%) 6 16 (1.6%)	0	434 (43%)
3 112 (11%) 4 58 (5.8%) 5 33 (3.3%) 6 16 (1.6%)	1	194 (19%)
58 (5.8%) 5 33 (3.3%) 6 16 (1.6%)	2	148 (15%)
5 6 33 (3.3%) 6 16 (1.6%)	3	112 (11%)
5 33 (3.3%) 6 16 (1.6%)	4	58 (5.8%)
6 16 (1.6%)	5	$33\ (3.3\%)$
	6	16 (1.6%)
	7	

Query parameter or value	Descriptive statistics
WHERE_n_of_operatorsbetween	
0	601 (60%)
1	301 (30%)
2	$75 \ (7.5\%)$
3	$21 \ (2.1\%)$
4	$1\ (0.1\%)$
5	1 (0.1%)
WHERE_n_of_operatorsgreater_or_less	202 (2011)
0	389 (39%)
1	330 (33%)
2	162 (16%)
3	81 (8.1%)
<i>4 5</i>	27 (2.7%)
	11 (1.1%)
WHERE_n_of_operatorsin 0	593 (59%)
1	305 (31%)
2	76 (7.6%)
3	21 (2.1%)
4	5 (0.5%)
WHERE_n_of_operatorslike	(3.67.5)
0	845 (85%)
1	140 (14%)
2	15 (1.5%)
WHERE_n_of_non_aggr_funcTRUNC	
0	971 (97%)
1	29 (2.9%)
$WHERE_n_of_non_aggr_func__LOG$	
0	941 (94%)
1	55 (5.5%)
2	4~(0.4%)
WHERE_n_of_non_aggr_funcROUND	0.07 (0.701)
0	967 (97%)
1	$33 \; (3.3\%)$
WHERE_n_of_non_aggr_funcSQRT	007 (0107)
0	907 (91%)
1 2	$91 (9.1\%) \\ 2 (0.2\%)$
WHERE_n_of_non_aggr_funcDOW	2 (0.270)
0	971 (97%)
1	29 (2.9%)
WHERE_n_of_non_aggr_funcABS	23 (2.970)
0	966 (97%)
1	34 (3.4%)
WHERE_n_of_non_aggr_funcMONTH	0.270)
0	975 (98%)
	(/

Query parameter or value	Descriptive statistics
1	25 (2.5%)
WHERE n_of_non_aggr_funcFLOOR	` ,
0	980 (98%)
1	19 (1.9%)
2	1(0.1%)
WHERE_n_of_non_aggr_funcYEAR	
0 = 0	969~(97%)
1	$30\ (3.0\%)$
2	1 (0.1%)
WHERE n of non aggr func DAY	(- / - /)
0	967 (97%)
1	32 (3.2%)
2	1 (0.1%)
WHERE n of all non aggr func	= (0.1=70)
0	685~(69%)
1	244 (24%)
2	62 (6.2%)
3	9 (0.9%)
GROUP_BY_n_of_columns	[0.00, 2.00, 9.00] 2.31 / 2.11
HAVING_n_of_main_predicates	[0.00, 2.00, 0.00] 2.01 / 2.11
0	462~(46%)
1	175 (18%)
2	179 (18%)
3	184 (18%)
ORDER_BY_n_of_columns	=== (==/=)
0	295~(30%)
1	389 (39%)
2	220~(22%)
3	70 (7.0%)
4	14 (1.4%)
5	5 (0.5%)
6	5 (0.5%)
$\frac{\sigma}{\gamma}$	2 (0.3%)
limit	[1, 497, 1,000] 504 / 293
offset	[0, 72, 998] 275 / 325
	[0, 12, 550] 210 / 525