EXPLAIN QUERY PLAN REPORT
on 5_overgroup

generated at 2025-09-15T18:59:24

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1. SQL statement q5_overgroup_query.sql

```
--- AGGREGATION ---  Partitioning with row_number function
with suppl(preffix, header1, header2, suffix, row_delimeter) as (select
        substr('|         |           |           |               |                   ',1,48)
        ," goods_id| customer_id| goods_type| goods_weight"
        ," goods_id| customer_id| goods_type| goods_weight| row number on goods_weight"
        ,substr('               ',1,15)
        ,"-----------------------------------------------------------------")
---- source data
select s.row_delimeter from suppl s
union all
select 'Input q4 DATA ==>'
union all
select s.header1 from suppl s
union all
select substr(goods_id||s.suffix,1,length('goods_id'))||'| '||
        substr(customer_id||s.suffix,1,length('customer_id'))||'| '||
        substr(goods_type||s.suffix,1,length('goods_type'))||'| '||
        substr(goods_weight||s.suffix,1,length('goods_weight'))
from CUSTGOODS, suppl s
union all
----- selected data
select s.row_delimeter from suppl s
union all
select 'Result q4 DATA ==>'
union all
select s.header2 from suppl s
union all
select (s.preffix||' partioned with goods_type  ') from suppl s
union all
select substr(goods_id||s.suffix,1,length('goods_id'))||'| '||
        substr(customer_id||s.suffix,1,length('customer_id'))||'| '||
        substr(goods_type||s.suffix,1,length('goods_type'))||'| '||
        substr(goods_weight||s.suffix,1,length('goods_weight'))||'| '||
        (ROW_NUMBER()
            OVER (partition by
            goods_type
            order BY goods_weight)) rn
FROM CUSTGOODS, suppl s
union all select "--- generated at " || strftime( datetime(current_timestamp, 'localtime'))
```

2. Explain query plan generated by <EXPLAINE QUERY PLAN sql_statement>

2.1. Plain report

step	id	parent	unused	detail
1	1	0	0	COMPOUND QUERY
2	2	1	0	LEFT-MOST SUBQUERY
3	5	2	0	MATERIALIZE suppl
4	7	5	0	**SCAN CONSTANT ROW**
5	29	2	16	**SCAN s**
6	34	1	0	UNION ALL
7	35	34	0	**SCAN CONSTANT ROW**
8	38	1	0	UNION ALL
9	41	38	216	**SCAN s**
10	46	1	0	UNION ALL
11	50	46	216	**SCAN CUSTGOODS**
12	52	46	216	**SCAN s**
13	91	1	0	UNION ALL
14	94	91	216	**SCAN s**
15	99	1	0	UNION ALL
16	100	99	0	**SCAN CONSTANT ROW**
17	103	1	0	UNION ALL
18	106	103	216	**SCAN s**
19	111	1	0	UNION ALL
20	114	111	216	**SCAN s**
21	120	1	0	UNION ALL
22	123	120	0	CO-ROUTINE (subquery-12)
23	128	123	216	**SCAN CUSTGOODS**
24	130	123	216	**SCAN s**
25	143	123	0	USE TEMP B-TREE FOR ORDER BY
26	163	120	336	**SCAN (subquery-12)**
27	243	1	0	UNION ALL
28	244	243	0	**SCAN CONSTANT ROW**

2.2. GRAPH report

```
            EXPLAINE QUERY PLAN
step 1....  |__COMPOUND QUERY...node(id: 1)
step 2....     |--LEFT-MOST SUBQUERY...node(id: 2)
step 3....     |   |--MATERIALIZE suppl...node(id: 5)
step 4....     |   |   |__SCAN CONSTANT ROW...node(id: 7)
step 5....     |   |__SCAN s...node(id: 29, notused: 16)
step 6....     |--UNION ALL...node(id: 34)
step 7....     |   |__SCAN CONSTANT ROW...node(id: 35)
step 8....     |--UNION ALL...node(id: 38)
step 9....     |   |__SCAN s...node(id: 41, notused: 216)
step 10...     |--UNION ALL...node(id: 46)
step 11...     |   |--SCAN CUSTGOODS...node(id: 50, notused: 216)
step 12...     |   |__SCAN s...node(id: 52, notused: 216)
step 13...     |--UNION ALL...node(id: 91)
step 14...     |   |__SCAN s...node(id: 94, notused: 216)
step 15...     |--UNION ALL...node(id: 99)
step 16...     |   |__SCAN CONSTANT ROW...node(id: 100)
step 17...     |--UNION ALL...node(id: 103)
step 18...     |   |__SCAN s...node(id: 106, notused: 216)
step 19...     |--UNION ALL...node(id: 111)
step 20...     |   |__SCAN s...node(id: 114, notused: 216)
step 21...     |--UNION ALL...node(id: 120)
step 22...     |   |--CO-ROUTINE (subquery-12)...node(id: 123)
step 23...     |   |   |--SCAN CUSTGOODS...node(id: 128, notused: 216)
step 24...     |   |   |--SCAN s...node(id: 130, notused: 216)
step 25...     |   |   |__USE TEMP B-TREE FOR ORDER BY...node(id: 143)
step 26...     |   |__SCAN (subquery-12)...node(id: 163, notused: 336)
step 27...     |__UNION ALL...node(id: 243)
step 28...         |__SCAN CONSTANT ROW...node(id: 244)
```