generated at 2025-09-15T00:07:02

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#### 1. SQL statement q4\_overgroup\_query.sql

```
--- AGGREGATION --- Partitioning with row_number function
with header1(col1, col2, col3, col4, col5) as
(select " goods_id", "customer_id", "goods_type", "goods_weight", "comment")
,header2(col1, col2, col3, col4, col5) as
(select " goods_id", "customer_id", "goods_type", "goods_weight", "row number on goods_weight partioned
with goods_type ")
 ---- source data
select "SubTab", "A table with processing input data ", " ", " ", " "
union all
select h1.col1, h1.col2, h1.col3, h1.col4, h1.col5 from header1 h1
union all
select goods_id,
     customer_id,
     goods_type
 goods_weight,
"An input data for an example query"
from CUSTGOODS
union all
select "SubTab", "A table with results data ", " ", " ", " "
union all
select h2.col1, h2.col2, h2.col3, h2.col4, h2.col5 from header2 h2
union all select goods_id,
     customer_id,
     goods_type,
     goods_weight,
    (ROW_NUMBER()
        OVER (partition by
goods_type
  order BY goods_weight)) rn
FROM CUSTGOODS
--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	pare nt	unu sed	detail		
1	1	0	0	COMPOUND QUERY		
2	2	1	0	LEFT-MOST SUBQUERY		
3	3	2	0	SCAN CONSTANT ROW		
4	10	1	0	UNION ALL		
5	12	10	0	CO-ROUTINE header1		
6	13	12	0	SCAN CONSTANT ROW		
7	21	10	16	SCAN h1		
8	31	1	0	UNION ALL		
9	33	31	216	SCAN CUSTGOODS		
10	42	1	0	UNION ALL		
11	43	42	0	SCAN CONSTANT ROW		
12	50	1	0	UNION ALL		
13	52	50	0	CO-ROUTINE header2		
14	53	52	0	SCAN CONSTANT ROW		
15	61	50	16	SCAN h2		
16	71	1	0	UNION ALL		
17	74	71	0	CO-ROUTINE (subquery-9)		
18	77	74	216	SCAN CUSTGOODS		
19	88	74	0	USE TEMP B-TREE FOR ORDER BY		
20	107	71	216	SCAN (subquery-9)		



#### 2.2. GRAPH report

```
EXPLAINE QUERY PLAN
step 1.... | __COMPOUND QUERY...node(id: 1)
                --LEFT-MOST SUBQUERY...node(id: 2)
step 2....
                  |__SCAN CONSTANT ROW...node(id: 3)
step 3....
step 4....
                 --UNION ALL...node(id: 10)
                  |--CO-ROUTINE header1...node(id: 12)
step 5....
step 6....
                      |__SCAN CONSTANT ROW...node(id: 13)
step 7....
                    \underline{\hspace{0.1cm}}SCAN h1...node(id: 21, notused: 16)
                --UNION ALL...node(id: 31)
step 8....
                  |__SCAN CUSTGOODS...node(id: 33, notused: 216)
step 9....
                --UNION ALL...node(id: 42)
step 10...
step 11...
                  __SCAN CONSTANT ROW...node(id: 43)
                 --UNION ALL...node(id: 50)
step 12...
step 13...
                  |--CO-ROUTINE header2...node(id: 52)
                      |__SCAN CONSTANT ROW...node(id: 53)
step 14...
step 15...
                    SCAN h2...node(id: 61, notused: 16)
                  UNION ALL...node(id: 71)
step 16...
                   |--CO-ROUTINE (subquery-9)...node(id: 74)
step 17...
step 18...
                       --SCAN CUSTGOODS...node(id: 77, notused: 216)
                        _USE TEMP B-TREE FOR ORDER BY...node(id: 88)
step 19...
step 20...
                     SCAN (subquery-9)...node(id: 107, notused: 216)
```