

Question 2 Query

The Query

```
select "CustomerID", recency, frequency, r_score, fm_score,
       case when (r_score = 5 and (fm_score in (5, 4)) or (r_score = 4 and fm_score = 5))
           THEN 'Champions'
       when ((r_score in ( 5 , 4) and fm_score = 2) or ((r_score in( 3, 4) and fm_score = 3)))
           THEN 'Potential loyalists'
       when ((r_score = 5 and fm_score = 3) or (r_score = 4 and fm_score = 4) or (r_score = 3 and (fm_score in( 4 , 5))))
           THEN 'loyal Customers'
       when (r_score = 5 and fm_score = 1)
           THEN 'loyal Customers'
       when ((r_score in( 4, 3)) and fm_score = 1)
           THEN 'Promising'
       when ((r_score in( 3, 2) and fm_score = 2) or (r_score = 2 and fm_score = 3))
           THEN 'Customers Needing Attention'
       when ((r_score = 2 and (fm_score in( 5, 4))) or (r_score = 1 and fm_score = 3))
           THEN 'At Risk'
       when (r_score = 1 and (fm_score in( 5, 4)))
           THEN 'Cant Lose Them'
       when (r_score = 1 and fm_score = 2)
           THEN 'Hibernating'
       when (r_score = 1 and fm_score = 1)
           THEN 'Lost'
END group_name
```

```
from (
Select "CustomerID", recency, frequency, monetary, ntile(5) over (order by s.recency) as r_score,
ntile(5) over (order by (frequency+ monetary/2)) as fm_score
from
(
With rank_cte(cust_id, inv_date, rnk)
as
(
select distinct "CustomerID", "InvoiceDate",
Dense_rank () over(partition by "CustomerID" order by "InvoiceDate" desc ) AS "rank"
FROM public."Online_Retail"
order by "CustomerID" desc, "rank"
)
Select distinct tbl."CustomerID",
first_value(tbl."InvoiceDate") over(partition by tbl."CustomerID" order by tbl."InvoiceDate"
desc ) as refrence_date,
cte.inv_date as date_2 ,
first_value(tbl."InvoiceDate") over(partition by tbl."CustomerID" order by tbl."InvoiceDate"
desc ) -
cte.inv_date as recency,
count(tbl."InvoiceNo") over (partition by tbl."CustomerID" ) as frequency,
sum(purchase_price) over (partition by tbl."CustomerID" ) as monetary
from public."Online_Retail" tbl
join rank_cte cte
on tbl."CustomerID" = cte.cust_id and cte.rnk = 2
order by tbl."CustomerID" desc
) s
```

Question 2 Result

Result

Data output							Messages	Query History	Notifications
	CustomerID character varying	recency integer	frequency bigint	r_score integer	fm_score integer	group_name text			
1	12985	1	78	1	3	At Risk			
2	16986	1	3	1	4	Cant Lose Them			
3	18248	1	49	1	2	Hibernating			
4	16124	1	16	1	1	Lost			
5	12931	1	102	1	5	Cant Lose Them			
6	17266	1	80	1	1	Lost			
7	12839	1	316	1	5	Cant Lose Them			
8	15502	1	252	1	5	Cant Lose Them			
9	12479	1	35	1	2	Hibernating			
10	18139	1	162	1	5	Cant Lose Them			
11	15060	1	121	1	2	Hibernating			
12	15810	1	112	1	3	At Risk			
13	17857	1	56	1	5	Cant Lose Them			
14	15888	1	14	1	1	Lost			
15	15230	1	23	1	1	Lost			
16	12552	1	20	1	1	Lost			
17	12679	1	56	1	3	At Risk			
Total rows: 1000 of 2992							Query complete 00:00:07.571		