```
Case
when F.r_score >= 5 and F.fm_score >= 5
or F.r_score >= 5 and F.fm_score =4
or F.r_score = 4 and F.fm_score >= 5 then 'Champions'
when F.r_score >= 5 and F.fm_score = 2
or F.r_score = 4 and F.fm_score = 2
or F.r_score = 3 and F.fm_score = 3
or F.r score = 4 and F.fm score >= 3 then 'Potential Loyalists'
when F.r_score >= 5 and F.fm_score = 3
or F.r_score = 4 and F.fm_score = 4
or F.r_score = 3 and F.fm_score >= 5
or F.r_score = 3 and F.fm_score >= 4 then 'Loyal Customers'
when F.r_score >= 5 and F.fm_score = 1 then 'Recent Customers'
when F.r_score = 4 and F.fm_score = 1
or F.r_score = 3 and F.fm_score = 1 then 'Promising'
when F.r_score = 3 and F.fm_score = 2
or F.r_score = 2 and F.fm_score = 3
or F.r_score = 2 and F.fm_score = 2 then 'Customers Needing Attention'
when F.r_score = 2 and F.fm_score >= 5
or F.r_score = 2 and F.fm_score = 4
or F.r_score = 1 and F.fm_score = 3 then 'At Risk'
```

select distinct F.customerid, F.recency, F.frequency, F.monetary, F.r\_score, F.fm\_score,

```
when F.r_score = 1 and F.fm_score >= 5
or F.r_score = 1 and F.fm_score = 4 then 'Cant Lose Them'
when F.r_score = 1 and F.fm_score = 2
or F.r_score = 2 and F.fm_score = 1 then 'Hibernating'
when F.r_score = 1 and F.fm_score <= 1 then 'Lost'
End cust_segment
from (select distinct L.customerid, L.recency, L.frequency, L.monetary,
NTILE(5) over( order by L.recency desc ) as r_score ,
Avg((L.frequency+L.monetary)/2) over(rows between current row and current row) ::numeric(10) as
fm_score
from (
with freq As (
select customerid, count(distinct invoiceno) as frequency
from online_retail
group by customerid
having customerid != "),
recency As (select distinct X.customerid,
ceil(first_value((extract(day from (Y.reference_date - TO_TIMESTAMP(invoicedate, 'mm-dd-yyyy
HH24:MI')))*24
                                + extract(hour from (Y.reference_date -
TO_TIMESTAMP(invoicedate, mm-dd-yyyy HH24:MI'))))/24)
over(partition by X.customerid order by X.invoicedate desc )) as recency
from (select max(TO_TIMESTAMP(invoicedate, 'mm-dd-yyyy HH24:MI')) as reference_date
from online retail where customerid != ") Y, online retail X
where customerid != ")
```

```
select distinct O.customerid , freq.frequency , recency.recency , sum(O.unitprice) over(partition by O.customerid) as monetary from online_retail O join freq using(customerid) join recency using(customerid) where O.customerid != '' ) As L) F where F.customerid in ('13256' ,'15118', '12875','13366','17752', '14609','15753','16881')
```