WITH cust\_segmentation(customerid, recency, frequency, monetary)

AS

( SELECT

customerid

,(SELECT MAX(CAST(invoicedate AS DATE)) FROM online\_retail) - MAX(CAST(invoicedate AS DATE)) AS recency

, NTILE(5) OVER(ORDER BY COUNT(invoiceno)) AS frequency

, NTILE(5) OVER(ORDER BY SUM(price)) AS monetary

FROM online\_retail

GROUP BY customerid),

get\_fm\_score (customerid, r\_score, fm\_score) AS

(

SELECT customerid

, NTILE(5) OVER(ORDER BY recency DESC) AS r\_score

,(frequency+ NTILE(5) OVER(ORDER BY recency DESC)) /2 AS fm\_score

FROM cust\_segmentation

GROUP BY customerid, recency, frequency

),

frm\_for\_case (customerid, rfm\_score) AS

(

SELECT customerid, CONCAT(r\_score, fm\_score) AS rfm\_score

FROM get\_fm\_score

)

SELECT cs.customerid, recency, frequency, monetary, r\_score, fm\_score,

CASE WHEN rfm\_score IN ('55', '54', '45') THEN 'Champions'

WHEN rfm\_score IN ('52', '42', '33', '43') THEN 'Potential Loyalists'

WHEN rfm\_score IN ('53', '44', '35', '34') THEN 'Loyal Customers'

WHEN rfm\_score IN ('51') THEN 'Recent Customers'

WHEN rfm\_score IN ('41', '31') THEN 'Promising'

WHEN rfm\_score IN ('32', '23', '22') THEN 'Customers Needing Attention'

WHEN rfm\_score IN ('25', '24', '13') THEN 'At Risk'

WHEN rfm\_score IN ('15', '14') THEN 'Cant Lose Them'

WHEN rfm\_score IN ('12') THEN 'Hibernating'

WHEN rfm\_score IN ('11') THEN 'Lost'

END as customer\_seg

FROM cust\_segmentation cs

JOIN get\_fm\_score fm

ON cs.customerid = fm.customerid

JOIN frm\_for\_case seg

ON fm.customerid = seg.customerid

ORDER BY customer\_seg ;