**Analytical SQL Case Study Q2**

All these queries are using table called **onlineretail** not **online\_retail**

**In onlineretail table I Removed null values in customerid column and change the datatype of INVOICEDATE from text to date**

**CREATE TABLE ONLINERETAIL AS**

**SELECT INVOICENO**

**, STOCKCODE**

**, DESCRIPTION**

**, QUANTITY**

**, TO\_TIMESTAMP(INVOICEDATE, 'MM,DD,YYYY HH24:MI') AS INVOICEDATE**

**, UNITPRICE**

**, CUSTOMERID**

**, COUNTRY**

**FROM ONLINE\_RETAIL**

**WHERE CUSTOMERID != ''**

**ORDER BY CUSTOMERID;**

**WITH temp\_online\_retail**

**AS (**

**SELECT \***

**, NTILE(5) OVER (**

**ORDER BY recency DESC**

**) R\_SCORE**

**, ROUND((**

**NTILE(5) OVER (**

**ORDER BY Frequency**

**) + NTILE(5) OVER (**

**ORDER BY Monetary**

**)**

**) / 2) AS FM\_SCORE**

**FROM (**

**SELECT CUSTOMERID**

**, (**

**SELECT MAX(invoicedate)**

**FROM ONLINERETAIL**

**) - MAX(invoicedate) recency**

**, SUM(QUANTITY \* unitprice) AS Monetary**

**, COUNT(invoiceno) AS Frequency**

**FROM ONLINERETAIL**

**GROUP BY CUSTOMERID**

**) AS sub**

**)**

**-- Customer Segmentation**

**SELECT \***

**, (**

**CASE**

**WHEN (R\_SCORE = 5 AND FM\_SCORE = 5**

**OR (R\_SCORE = 5 AND FM\_SCORE = 4)**

**OR (R\_SCORE = 4 AND FM\_SCORE = 5)**

**THEN 'Champion'**

**WHEN (R\_SCORE = 5 AND FM\_SCORE = 2)**

**OR (R\_SCORE = 4 AND FM\_SCORE = 2)**

**OR (R\_SCORE = 3 AND FM\_SCORE = 3)**

**OR (R\_SCORE = 4 AND FM\_SCORE = 3)**

**THEN 'Potential Loyalist'**

**WHEN (R\_SCORE = 5 AND FM\_SCORE = 3)**

**OR (R\_SCORE = 4 AND FM\_SCORE = 4)**

**OR (R\_SCORE = 3 AND FM\_SCORE = 5)**

**OR (R\_SCORE = 3 AND FM\_SCORE = 4)**

**THEN 'Loyal Customer'**

**WHEN (R\_SCORE = 5 AND FM\_SCORE = 1)**

**THEN 'Recent Customer'**

**WHEN (R\_SCORE = 4 AND FM\_SCORE = 1)**

**OR (R\_SCORE = 3 FM\_SCORE = 1)**

**THEN 'Promising'**

**WHEN (R\_SCORE = 3 AND FM\_SCORE = 2)**

**OR (R\_SCORE = 2 AND FM\_SCORE = 3)**

**OR (R\_SCORE = 2 AND FM\_SCORE = 2)**

**THEN 'Customer Needing Attention'**

**WHEN (R\_SCORE = 2 AND FM\_SCORE = 5)**

**OR (R\_SCORE = 2 AND FM\_SCORE = 4)**

**OR (R\_SCORE = 1 AND FM\_SCORE = 3)**

**THEN 'At Risk'**

**WHEN (R\_SCORE = 1 AND FM\_SCORE = 5)**

**OR (R\_SCORE = 1 AND FM\_SCORE = 4)**

**THEN 'Cant Lose Them'**

**WHEN (R\_SCORE = 1 AND FM\_SCORE = 5)**

**OR (R\_SCORE = 1 AND FM\_SCORE = 2)**

**THEN 'Hibernating'**

**WHEN (R\_SCORE = 1 AND FM\_SCORE = 1)**

**THEN 'Lost'**

**END**

**)**

**FROM temp\_online\_retail;**