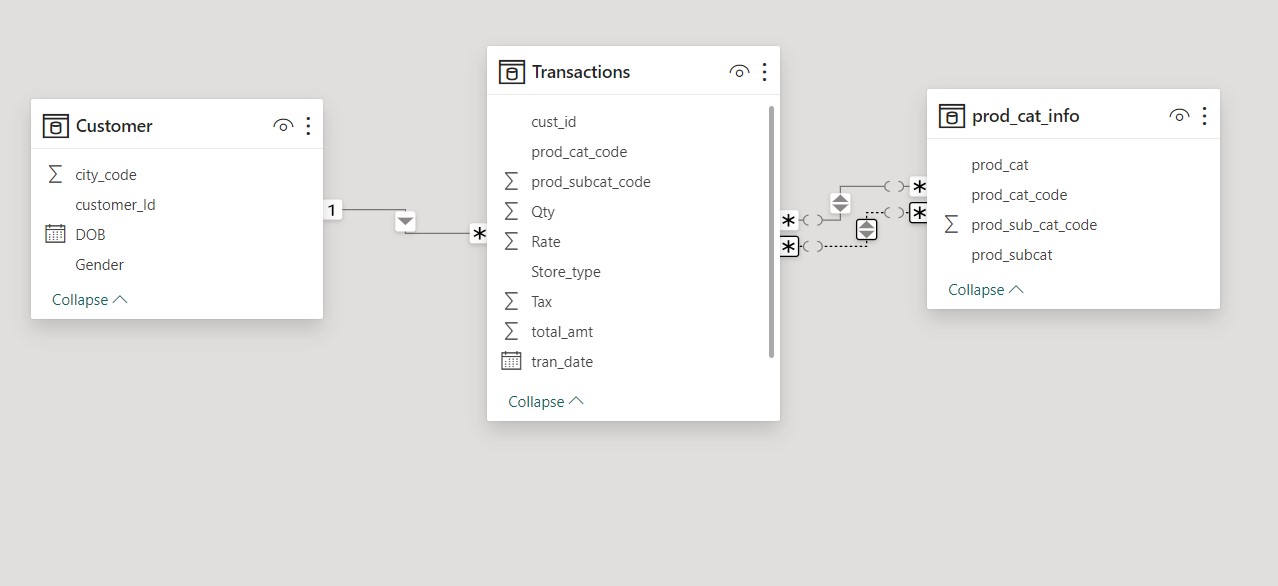
**RETAIL ANALYTICS**

**Business Objective :** To understand the customer behaviour,preferences and trends using their point of sale data(POS).

**DATA AVAILABILITY**

**3 datasets:**

1.CUSTOMER: contains customer information.

2.TRANSACTIONS: contains customer transactions details.

3.PRODUCT CATEGORY: contains product and sub-category information.

**Q1) What is the total no of rows in each of the three tables?**

**Select**

'customer' **as** C, **Count(\*)** **as** TotalRows **From** customer

**Union**

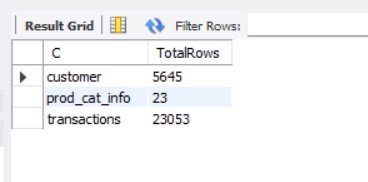
**Select**

'prod\_cat\_info' **as** P, **Count(\*)** **as** TotalRows **From** prod\_cat\_info

**Union all**

**Select**

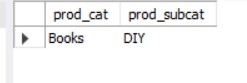
'transactions' **as** T, **Count(\*)** **as** TotalRows **From** transactions;



**Q2) Which product category does the sub-category DIY belongs to?**

**Select** prod\_cat,prod\_subcat **from** prod\_cat\_info

**where** prod\_subcat**="DIY"**;

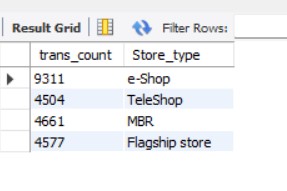


**Q3) Which Store is most frequently used for transactions?**

**Select** **count**( transaction\_id**) as** trans\_count,Store\_type

**from** transactions

**group by** Store\_type;



**Q4) What is the count of Male and Female customers in the database?**

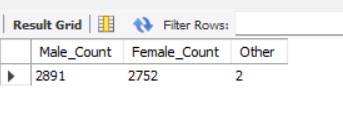
**Select**

**Count**(**Case When** Gender = **'M'** **Then 1** **End**) **as** Male\_Count,

**Count**(**Case When** Gender = **'F'** **Then** **1** **End**) **as** Female\_Count,

**Count**(**Case When** Gender **not In** (**'M', 'F'**) **Then** **1** **End**) **as** Other

**From** customer;



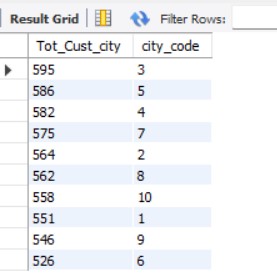
**Q5) From which city do we have the maximum no of customers?**

**Select count**(customer\_Id) **as** Tot\_Cust\_city,city\_code

**from** customer

**group by** city\_code

**order by** Tot\_Cust\_city **desc**;



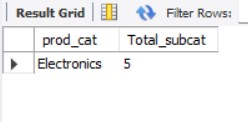
**Q6) How many sub-categories are there under the book category?**

**select** prod\_cat,**count**(prod\_subcat) **a**s Total\_subcat

**from** prod\_cat\_info

**where** prod\_cat=**"Electronics"**

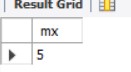
**group by** prod\_cat;



**Q7) What is the maximum quantity ordered?**

**Select** **max**(qty) **as** mx

**from** transactions;

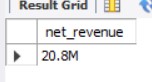


**Q8) What is the net total revenue generated in categories electronics and books?**

**Select concat**(**round**(**SUM**(total\_amt - Tax)/**1000000**,**1**),"**M**") **as** net\_revenue

**From** transactions

**Where** prod\_cat\_code **in** (**3,5**);



**Q9) How many customers have more than 9 transactions, excluding returns?**

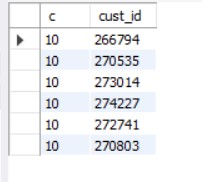
**Select count**(transaction\_id)-**1** as c,cust\_id

**from** transactions

**where** Qty>=**0**

**group by** cust\_id

**having** **count**(transaction\_id)-**1**>**9**;

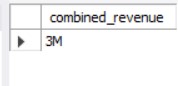


**Q10) What is the combined revenue earned from “Electronics” and “Clothing” categories from flagship stores?**

**Select** **concat**(**round**( **SUM**(t.total\_amt-tax)/**1000000**,**2**),**"M"** ) **as** combined\_revenue

**From** Transactions t **Join** prod\_cat\_info p **ON** t.prod\_cat\_code = p.prod\_cat\_code **and** t.prod\_subcat\_code=p.prod\_sub\_cat\_code

**Where** p.prod\_cat **in** (“**Electronics**”, **“Clothing”**) **and** t.Store\_type **like** **"flag%"** ;



**Q11) What is the total revenue generated from Male customers in electronics category?**

**select round**(**sum**(total\_amt-tax)/**1000000**,**2**) **as** Total\_rev

**from** customer c inner join transactions t **on** c.customer\_id=t.cust\_id

**inner join** prod\_cat\_info p **on** p.prod\_cat\_code=t.prod\_cat\_code **and** p.prod\_sub\_cat\_code=t.prod\_subcat\_code

**where** prod\_cat =**"Electronics"** and gender=**"M"**;

