Q1

```sql
--------------------------------------------------------------------------------------------
--Q1 Display all columns for all transactions.
--Expected output : ALL column

SELECT*
FROM practical1.dataset.retail_sales;

-------------------------------------------------------------------------
-----------------------------------------------------------------------------------------------
--Q2 Display the only the transaction ID ,Date , and Customer ID for all records
--Expected output : Transaction ID ,Date ,Customer ID



-------------------------------------------------------------------------------------
SELECT transaction_id,
    date,
    customer_id
```

Results | Chart

TRANSACTION_ID	DATE	CUSTOMER_ID	GENDER	AGE	PRODUCT_CATEGORY	QUANTI
1	2023-11-24	CUST001	Male	34	Beauty	
2	2023-02-27	CUST002	Female	26	Clothing	
3	2023-01-13	CUST003	Male	50	Electronics	

Query Details

Query duration 456ms

Rows 1K

Query ID 01bfdbad-000c-b142-0...

Q2

```
--Q2 Display the only the transaction ID ,Date , and Customer ID for all records
--Expected output : Transaction ID ,Date ,Customer ID


SELECT Transaction_ID,Date,Customer_Id
FROM practical1.dataset.retail_sales;
-----------------------------------------------------------------------------------------




------------------------------------------------------------------------------------------------------------------------------
------------------------------------------------------------------------------------------------------------------------------
--
--Q3. Display all the distinct product categories in the dataset.
--Expected output :Product.Category

SELECT DISTINCT product_category
FROM practical1.dataset.retaiSELECT transaction_id,
```

Results | Chart

	TRANSACTION_ID	DATE	CUSTOMER_ID
1	1	2023-11-24	CUST001
2	2	2023-02-27	CUST002
3	3	2023-01-13	CUST003
4	4	2023-05-21	CUST004

Query Details
Query duration 67ms
Rows 1K
Query ID 01bfdbb3-000c-b142-0...

Q3

```
--Q3. Display all the distinct product categories in the dataset.
--Expected output :Product.Category

SELECT DISTINCT product_category
FROM practical1.dataset.retail_sales;




----------------------------------------------------------------------------------------------------------------
----------------------------------------------------------------------------------------------------------------
--
--Q4.Display all transactions all the distinct gender values in the dataset .
```

Results | Chart

	PRODUCT_CATEGORY
1	Clothing
2	Beauty
3	Electronics

Query Details
Query duration 397ms
Rows 3
Query ID 01bfdbc2-000c-b142-0...

Q4.

```
--Q4.Display all transactions all the distinct gender values in the dataset .
--Expected output:Gender

SELECT DISTINCT Gender
FROM  practical1.dataset.retail_sales;


----------------------------------------------------------------------------------
----------------------------------------------------------------------------------
```

Results | Chart

	GENDER
1	Male
2	Female

Query
Query
Rows
Query

Q5

```
--Q5.Display all transactions where the Age is greater than 40 .
--Expected output:All columns


SELECT*
FROM practical1.dataset.retail_sales
WHERE AGE > 40;

-----------------------------------------------------------------------------------------------------------------------
-----------------------------------------------------------------------------------------------------------------------
--
```

Results | Chart

	TRANSACTION_ID	DATE	CUSTOMER_ID	GENDER	AGE	PRODUCT_CATEGORY	QUANTIT
1	3	2023-01-13	CUST003	Male	50	Electronics	
2	6	2023-04-25	CUST006	Female	45	Beauty	
3	7	2023-03-13	CUST007	Male	46	Clothing	

Query Details

Query duration

Rows

Query ID

Q6

```
--Q6.Display all transactions where the price per unit is between 100 and 500.
--Expected output:All columns

SELECT*
FROM practical1.dataset.retail_sales
WHERE price_per_unit BETWEEN 100 AND 500;

-----------------------------------------------------------------------------------------------------------------------
-----------------------------------------------------------------------------------------------------------------------
--

Q7.Display all transactions where the product category is either 'Beauty'or 'Electonics'
Expected
```

Results | Chart

	TRANSACTION_ID	DATE	CUSTOMER_ID	GENDER	AGE	PRODUCT_CATEGORY	QUANTIT
1	2	2023-02-27	CUST002	Female	26	Clothing	
2	4	2023-05-21	CUST004	Male	37	Clothing	
3	9	2023-12-13	CUST009	Male	63	Electronics	

Query Details

Query duration

Rows

Query ID 01bfdbca-000c-b14

Q7

```
56
57  Q7.Display all transactions where the product category is either 'Beauty'or 'Electonics'
58  Expected
59  output: All Columns
60
61  SELECT*
62  FROM practical1.dataset.retail_sales
63  WHERE product_category IN ('Beauty', 'Electonics');
64
```

Results | Chart

	TRANSACTION_ID	DATE	CUSTOMER_ID	GENDER	AGE	PRODUCT_CATEGORY	QUANTIT
1	1	2023-11-24	CUST001	Male	34	Beauty	
2	5	2023-05-06	CUST005	Male	30	Beauty	
3	6	2023-04-25	CUST006	Female	45	Beauty	

Q8

```
67  Q8.Diplay all transactions where the Product Category is not 'Clothing'.
68  Expected output:All columns
69
70  SELECT*
71  FROM practical1.dataset.retail_sales
72  WHERE product_category NOT IN('Beauty','Electonics');
73
74  ----------------------------------------------------------------------------------------------------
    ----------------------------------------------------------------------------------------------------
    --
```

Results | Chart

	TRANSACTION_ID	DATE	CUSTOMER_ID	GENDER	AGE	PRODUCT_CATEGORY	QUANTIT
1	2	2023-02-27	CUST002	Female	26	Clothing	
2	3	2023-01-13	CUST003	Male	50	Electronics	
3	4	2023-05-21	CUST004	Male	37	Clothing	

Q8

```
76  Q9.Diplay all transactions where the Quantity is greater than or equal to 3.
77  Expected output:All columns
78
79  SELECT*
80  FROM practical1.dataset.retail_sales
81  WHERE QUANTITY >=3;
82
83  ----------------------------------------------------------------------------------------------------
    ----------------------------------------------------------------------------------------------------
    --
84
```

Results | Chart

	TRANSACTION_ID	DATE	CUSTOMER_ID	GENDER	AGE	PRODUCT_CATEGORY	QUANTIT
1	1	2023-11-24	CUST001	Male	34	Beauty	
2	8	2023-02-22	CUST008	Male	30	Electronics	
3	10	2023-10-07	CUST010	Female	52	Clothing	

Q9


```
76  Q9.Diplay all transactions where the Quantity is greater than or equal to 3.
77  Expected output:All columns
78
79  SELECT*
80  FROM practical1.dataset.retail_sales
81  WHERE QUANTITY >=3;
82
83  ----------------------------------------------------------------------------------------------------
    ----------------------------------------------------------------------------------------------------
    --
84
```

Results | Chart

	TRANSACTION_ID	DATE	CUSTOMER_ID	GENDER	AGE	PRODUCT_CATEGORY	QUANTIT
1	1	2023-11-24	CUST001	Male	34	Beauty	
2	8	2023-02-22	CUST008	Male	30	Electronics	
3	10	2023-10-07	CUST010	Female	52	Clothing	

Query Details

Query duration

Rows

Query ID 01bfdbce

Q10

```
76  Q9.Diplay all transactions where the Quantity is greater than or equal to 3.
77  Expected output:All columns
78
79  SELECT*
80  FROM practical1.dataset.retail_sales
81  WHERE QUANTITY >=3;
82
83  ----------------------------------------------------------------------------------------------------------------
    ----------------------------------------------------------------------------------------------------------------
    --
84
```

Results | Chart

	TRANSACTION_ID	DATE	CUSTOMER_ID	GENDER	AGE	PRODUCT_CATEGORY	QUANTIT
1	1	2023-11-24	CUST001	Male	34	Beauty	
2	8	2023-02-22	CUST008	Male	30	Electronics	
3	10	2023-10-07	CUST010	Female	52	Clothing	

Query Details

Query duration

Rows

Query ID 01b

Q11


```
76  Q9.Diplay all transactions where the Quantity is greater than or equal to 3.
77  Expected output:All columns
78
79  SELECT*
80  FROM practical1.dataset.retail_sales
81  WHERE QUANTITY >=3;
82
83  ----------------------------------------------------------------------------------------------------------------
    ----------------------------------------------------------------------------------------------------------------
    --
84
```

Results | Chart

	TRANSACTION_ID	DATE	CUSTOMER_ID	GENDER	AGE	PRODUCT_CATEGORY	QUANTIT
1	1	2023-11-24	CUST001	Male	34	Beauty	
2	8	2023-02-22	CUST008	Male	30	Electronics	
3	10	2023-10-07	CUST010	Female	52	Clothing	

Query Details

Query duration

Rows

Query ID 01bfdbc

Q12

```sql
Q12.Find the total quantity of products sold .
Expected output:Total_Quantity

SELECT SUM(Quantity) AS Total_Quantity
FROM practical1.dataset.retail_sales;
```

Results | Chart

	TOTAL_QUANTITY
1	2514

Query Details
Query duration 22ms
Rows 1
Query ID 01bfdbd2-000c-b142-0...

Q13

```sql
Q13.Find the number of transactions per Product Category.
Expected output:Max_Total_Amount

SELECT MAX(Total_Amount)
FROM practical1.dataset.retail_sales;

--------------------------------------------------------------------------------------------------------------------------------------------------------------
--------------------------------------------------------------------------------------------------------------------------------------------------------------

--Q14.Find the minimum Price per Product category .
```

Results | Chart

	MAX(TOTAL_AMOUNT)
1	2000

Query Details
Query duration 30ms
Rows 1
Query ID 01bfdbd4-000c-b142-0...

Q14

```sql
--Q14.Find the minimum Price per Product category .
--Expected output:Min_Price_per_unit

SELECT MIN(price_per_unit)
FROM practical1.dataset.retail_sales;
```

Results | Chart

	MIN(PRICE_PER_UNIT)
1	25

Query Details
Query duration
Rows
Query ID 01bfdbd7-000c-b142

Q15

```
124  -Q15.Find the number of of transactions per Product Category .
125  --Expected output:Product category,Transaction_Count
126
127  SELECT COUNT(product_category)
128  FROM practical1.dataset.retail_sales
129  GROUP BY transaction_id;
130  ----------------------------------------------------------------------------------------------------------------
     ----------------------------------------------------------------------------------------------------------------
131  --Q16.Find the total revenue (totalAmount) per gender .
```

Results | Chart

	COUNT(PRODUCT_CATEGORY)
1	1
2	1
3	1
4	1

Query Details
Query duration
Rows
Query ID 01b

Q16

```
131  --Q16.Find the total revenue (totalAmount) per gender .
132  --Expected output:Gender ,Total_Revenue
133
134  SELECT SUM(total_amount)
135  FROM practical1.dataset.retail_sales
136  GROUP BY GENDER ;
137
138  ----------------------------------------------------------------------------------------------------------------
     ----------------------------------------------------------------------------------------------------------------
139
```

Results | Chart

	SUM(TOTAL_AMOUNT)
1	223160
2	232840

Query Details
Query duration
Rows
Query ID 01bfdbd9-000c

Q17

```sql
--Q17.Find the average Price per unit Per product category.
--Expected output :Product Category ,Average_Price

SELECT AVG (PRICE_PER_UNIT)
FROM practical1.dataset.retail_sales
GROUP BY product_category;
```

Results | Chart

	AVG (PRICE_PER_UNIT)
1	184.055375
2	174.287749
3	181.900585

Query Details

Query duration

Rows

Query ID 01b

Q18

```sql
--Q18. Find the toal revenue per product category where total revenue is greater than 10000.
--Expected output :Product Category ,Total_Revenue

SELECT Product_category ,SUM (TOTAL_AMOUNT) AS Total_Revenue
FROM practical1.dataset.retail_sales
GROUP BY product_category
HAVING COUNT (total_revenue)>10000;
```

Results | Chart

Query Details

Query duration

Rows

Query ID 01b

Q19

```sql
--Q19.Find the average quantity per product category where the average is more than 2 .
--Expected output:Product category ,Average_Quantity

SELECT  Product_category,AVG(QUANTITY) AS Average_Quantity
FROM practical1.dataset.retail_sales
GROUP BY PRODUCT_CATEGORY
HAVING AVG (Quantity)>2;

--------------------------------------------------------------------------------------------------------------------------
--------------------------------------------------------------------------------------------------------------------------

--Q20.Display a column called Spending _Level that shows 'High' if Total Amount >1000,otherwise 'Low'.
```

Results | Chart

	PRODUCT_CATEGORY	AVERAGE_QUANTITY
1	Beauty	2.511401
2	Clothing	2.547009
3	Electronics	2.482456

Query Details

Query duration

Rows

Query ID

Q20

```sql
--Q20.Display a column called Spending _Level that shows 'High' if Total Amount >1000,otherwise 'Low'
--Expected output:Transaction ID,Total Amount ,Spending_Level

SELECT Transaction_id,
       total_amount,
       CASE
       WHEN TOTAL_AMOUNT>1000 THEN 'High'
       ELSE AS Spending_Level
FROM practical1.dataset.retail_sales;

--------------------------------------------------------------------------------------------------------------------------
--------------------------------------------------------------------------------------------------------------------------

--Q21.Display a new column called Age_Group that labels customers as:
```

Results | Chart

Syntax error: unexpected 'AS'. (line 176)

Q21

```sql
--Q21.Display a new column called Age_Group that labels customers as:
~'Youth' if Age <30
~'Adult' if Age is between 30 and 59
~ 'Senior' if Age > =60
--Expected output :Customer ID ,Age,Age_Group


SELECT Customer_ID,
       Age,
       CASE
       WHEN Age < 30 THEN 'Youth'
       WHEN Age BETWEEN 30 AND 59 THEN 'Adult'
       ELSE AS Age_Group
       FROM practical1.dataset.retail_sales;

```

Results | Chart

Syntax error: unexpected 'AS'. (line 193)

Query Details

Query duration

Rows

Query ID 01bfdbe2-000c-b