select \* from customer\_data

-- Q1. What is the total revenue generated by male vs. female customers?

select gender, sum(purchase\_amount) as total\_revenue

from customer\_data

group by gender;

-- Q2. Which customers used a discount but still spent more than the average purchase amount?

select customer\_id, purchase\_amount

from customer\_data

where discount\_applied = 'Yes' and purchase\_amount >(select avg(purchase\_amount)

from customer\_data);

-- Q3. Which are the top 5 products with the highest average review rating?

select item\_purchased, round(avg(review\_rating),2) as Average\_Product\_rating

from customer\_data

group by item\_purchased

order by avg(review\_rating) desc

limit 5;

-- Q4. Compare the average Purchase Amounts between Standard and Express Shipping.

select shipping\_type, round(avg(purchase\_amount),2) as avg\_purchase

from customer\_data

where shipping\_type in ('Standard', 'Express')

group by shipping\_type;

-- Q5. Do subscribed customers spend more? Compare average spend and total revenue between subscribers and non-subscribers.

select subscription\_status,

COUNT(customer\_id) AS total\_customers,

round(avg(purchase\_amount),2) as avg\_amt,

round(sum(purchase\_amount),2) as total\_revenue

from customer\_data

group by subscription\_status

order by avg\_amt, total\_revenue desc;

-- Q6. Which 5 products have the highest percentage of purchases with discounts applied?

SELECT item\_purchased,

ROUND(100\*SUM(CASE WHEN discount\_applied = 'Yes' THEN 1 ELSE 0 END)/COUNT(\*),2) AS discount\_rate

FROM customer\_data

GROUP BY item\_purchased

ORDER BY discount\_rate DESC

LIMIT 5;

-- Q7. Segment customers into New, Returning, and Loyal based on their total number of previous purchases, and show the count of each segment.

with customer\_type as (

SELECT customer\_id, previous\_purchases,

CASE

WHEN previous\_purchases = 1 THEN 'New'

WHEN previous\_purchases BETWEEN 2 AND 10 THEN 'Returning'

ELSE 'Loyal'

END AS customer\_segment

FROM customer\_data)

select customer\_segment,count(\*) AS "Number of Customers"

from customer\_type

group by customer\_segment;

-- Q8. What are the top 3 most purchased products within each category?

WITH item\_counts AS (

SELECT category,

item\_purchased,

COUNT(customer\_id) AS total\_orders,

ROW\_NUMBER() OVER (PARTITION BY category ORDER BY COUNT(customer\_id) DESC) AS item\_rank

FROM customer\_data

GROUP BY category, item\_purchased

)

select item\_rank, category, item\_purchased, total\_orders

from item\_counts

where item\_rank <= 3;

-- Q9. Are customers who are repeat buyers (more than 5 previous purchases) also likely to subscribe?

SELECT subscription\_status,

COUNT(customer\_id) AS repeat\_buyers

FROM customer\_data

WHERE previous\_purchases > 5

GROUP BY subscription\_status;

-- Q10. What is the revenue contribution of each age group?

select age, sum(purchase\_amount) as revenue

from customer\_data

group by age

order by revenue desc;