

SQL Query—

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

```
select gender,sum(purchase_amount) as revenue from customer  
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  
where discount_applied ="yes" and purchase_amount >= (select avg(purchase_amount) from customer);
```

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

```
select item_purchased,round(avg(review_rating),1) as average_review_rating from customer  
group by item_purchased order by average_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 average_Purchase_Amounts from customer  
group by shipping_type  
having shipping_type in( "Standard","Express");
```

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,  
round(avg(purchase_amount),2) as avg_spend,  
round(sum(purchase_amount),2) as total_amount from customer  
group by subscription_status  
order by total_amount,avg_spend;
```

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

```
select item_purchased,round(sum(case when discount_applied ="yes" then 1 else 0 end)*  
100/count(*),2) as dis_pct
```

```
from customer  
group by item_purchased order by dis_pct 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)  
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  
    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 total from customer
```

```
where previous_purchases > 5
```

```
group by subscription_status;
```

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

```
select age_group,sum(purchase_amount) as Revenue from customer
```

```
group by age_group;
```