

## CUSTOMER BEHAVIOR ANALYSIS USING SQL QUERIES

### 1. WHAT IS THE TOTAL REVENUE GENERATED BY MALE VS FEMALE CUSTOMERS?

```
SELECT Gender, sum(Purchase_Amount) AS total_purchase
FROM cust_behaviour
GROUP BY Gender ;
```

### 2. WHICH CUSTOMER USED A DISCOUNT BUT STILL SPENT MORE THAN THE AVERAGE AMOUNT?

```
SELECT Customer_ID, Purchase_Amount
FROM cb1
WHERE Purchase_Amount>
      (SELECT AVG(Purchase_Amount) AS avg_amt
       FROM cb1) AND Discount_Applied = 'Yes' ;
```

### 3. WHICH ARE THE TOP 5 PRODUCTS WITH THE HIGHEST AVERAGE REVIEW RATING?

```
SELECT Item_Purchased, ROUND(AVG(Cleaned_Review_Rating),2) as avg_rv_rating
FROM cb1
GROUP BY Item_Purchased
ORDER BY 2 DESC
LIMIT 5;
```

### 4. COMPARE THE AVERAGE PURCHASE AMOUNTS BETWEEN STANDARD AND EXPRESS SHIPPING

```
SELECT Shipping_Type, ROUND(AVG(Purchase_Amount),2) AS Avg_purchase_amt
FROM cb1
WHERE Shipping_Type IN ('Standard', 'Express')
GROUP BY Shipping_Type ;
```

### 5. DO SUBSCRIBED CUSTOMERS SPEND MORE? COMPARE THE AVERAGE AND TOTAL REVENUE BETWEEN SUBSCRIBERS AND NON-SUBSCRIBERS.

```

SELECT COUNT(Customer_ID) AS Total_cust, Subscription_Status, SUM(Purchase_Amount) AS Total_rev,
ROUND(AVG(Purchase_Amount),2) AS Avg_rev

FROM cb1

GROUP BY Subscription_Status ;

```

6. WHICH 5 PRODUCTS HAVE THE HIGEST PERCENTAGE OF PURCHASES WITH DISCOUNTS APPLIED?

```

SELECT Item_Purchased, SUM(Discount_Applied = 'Yes')*100 /COUNT(*) AS
high_percentage_of_purchases

FROM cb1

GROUP BY Item_Purchased

ORDER BY 2 Desc

LIMIT 5;

```

7. SEGMENT CUSTOMERS INTO NEW, RETURNING, AND LOYAL BASED ON THEIR TOTAL NUMBER OF PREVIOUS PURCHASES, AND SHOW THE COUNT OF EACH SEGMENT.

```

SELECT cust_segmnt, COUNT(cust_segmnt) AS cust_count

FROM

(SELECT Customer_ID,

CASE

    WHEN Previous_Purchases = 1 THEN 'NEW'

    WHEN Previous_Purchases BETWEEN 2 AND 10 THEN 'RETURNING'

    ELSE 'LOYAL'

END AS cust_segmnt

FROM cb1 ) cs

GROUP BY cust_segmnt ;

```

8. WHAT ARE THE TOP 3 PURCHASED PRODUCTS WITHIN EACH CATEGORY?

```

SELECT Category, Item_Purchased, purchase_count

FROM

    (SELECT Category, Item_Purchased, COUNT(*) AS purchase_count,

    ROW_NUMBER() OVER(PARTITION BY Category ORDER BY COUNT(*) DESC) AS item_rank

FROM cb1

```

```
GROUP BY Category, Item_Purchased) t  
WHERE item_rank<=3 ;
```

9. ARE CUSTOMERS WHO BUY REPEATEDLY (MORE THAN 5 PURCHASES) ALSO LIKELY TO SUBSCRIBE?

```
SELECT COUNT(*) AS no_of_repeat_buyers, Subscription_Status  
FROM cb1  
WHERE Previous_Purchases > 5  
GROUP BY Subscription_Status ;
```

10. WHAT IS THE REVENUE CONTRIBUTION OF EACH AGE GROUP?

```
SELECT Age_Group, SUM(Purchase_Amount) AS Rev_per_age_grp  
FROM cb1  
GROUP BY Age_Group  
ORDER BY 2 DESC;
```