**QUESTIONS AND ANSWERS ON**

**On E-Commerce Analytics**

**1.Rank Products by Total Sales Value?**

select product\_id,product\_name,sum(price) as Total\_Sales,

rank() over( order by sum(price) desc) as Rank\_Products

from products

group by product\_id,product\_name;

**2.Find Customers Who Made Orders in Consecutive Months?**

SELECT c.customer\_id,c.customer\_name,

LAG(MONTH(order\_date), 1) OVER (PARTITION BY c.customer\_id ORDER BY order\_date) AS prev\_month,

MONTH(order\_date) AS current\_month

FROM Customers c

JOIN Orders o ON c.customer\_id = o.customer\_id

HAVING current\_month - prev\_month = 1;

**3.Find Top 3 Customers by Total Order Value?**

select c.customer\_id,c.customer\_name,sum(o.total\_amount) as Total\_Order\_Value

FROM Customers c

JOIN Orders o ON c.customer\_id = o.customer\_id

group by c.customer\_id,c.customer\_name

order by Total\_Order\_Value desc

limit 3;

**4.Calculate Cumulative Revenue Over Time?**

select order\_date,

sum(total\_amount) over(order by order\_date ) as Cumulative\_Revenue

from orders;

**5.Products with the Highest Average Review Rating?**

select p.product\_name,avg(r.rating) as Avg\_Rating

from products P join reviews r on p.product\_id=r.product\_id

group by p.product\_name;

**6.Find Customers Who Have Never Reviewed a Product?**

SELECT customer\_name

FROM Customers c

LEFT JOIN Reviews r ON c.customer\_id = r.customer\_id

WHERE r.review\_id IS NULL;

**7. Find the Most Expensive Product Sold by Category?**

select category,product\_name,price as Most\_Expensive\_Product FROM products

WHERE (category, price) IN (

SELECT category, MAX(price)

FROM Products

GROUP BY category);

**8.Calculate the average number of products ordered per month?**

SELECT MONTH(order\_date) AS order\_month, AVG(quantity) AS avg\_quantity

FROM Orders

GROUP BY order\_month;

**9.Find the number of orders placed by customers from each country?**

SELECT country, COUNT(order\_id) AS total\_orders

FROM Customers c

JOIN Orders o ON c.customer\_id = o.customer\_id

GROUP BY country;

**10.Find products that have been ordered by more than one customer?**

SELECT product\_name

FROM Products p

JOIN Orders o ON p.product\_id = o.product\_id

GROUP BY product\_name

HAVING COUNT(DISTINCT customer\_id) > 1;