Name: Varshitha Akula Netid: va2437

1.Pull total number of orders that were completed on 18th March 2023

SELECT COUNT(*) AS total_completed_orders FROM orders WHERE DATE(order_date) = '2023-03-18';

2.Pull total number of orders that were completed on 18th March 2023 with the first name 'John' and last name 'Doe'

SELECT COUNT(orders.order_id) AS total_completed_orders
FROM orders JOIN customers ON orders.customer_id = customers.customer_id
WHERE DATE(orders.order_date) = '2023-03-18' AND customers.first_name = 'John'
AND customers.last_name = 'Doe';

3.Pull total number of customers that purchased in January 2023 and the average amount spend per customer

SELECT COUNT(DISTINCT customers.customer_id) AS total_customers, AVG(purchases.amount) AS average_amount_spent FROM customers

LEFT JOIN purchases ON customers.customer_id = purchases.customer_id WHERE purchases.purchase_date >= '2023-01-01'

AND purchases.purchase_date <= '2023-01-31';

4. Pull the departments that generated less than \$600 in 2022

SELECT department, SUM(revenue) AS total_revenue FROM sales WHERE YEAR(date) = 2022 GROUP BY department HAVING SUM(revenue) < 600;

5. What is the most and least revenue we have generated by an order

SELECT MAX(revenue) AS max_revenue, MIN(revenue) AS min_revenue FROM orders;

6. What were the orders that were purchased in our most lucrative order

```
SELECT TOP 1 order_id
FROM orders
ORDER BY revenue DESC;
-- Retrieve the details of orders in the most lucrative order
SELECT od.*
FROM order_details od
WHERE od.order_id IN (
    SELECT TOP 1 order_id
    FROM orders
    ORDER BY revenue DESC
);
```