

SQL BOOTCAMP PROJECT

TITLE: TO DO LIST WEB APP

WORD PROBLEM CONTEXT:

You are a data analyst at a retail company called ShopKart. Your manager asks you to analyze customer and order data stored in a database with the following two tables:

1. Customers

	CustomerID	Name	City	Age
	-----	-----	-----	-----
	1	Alice	Delhi	25
	2	Bob	Mumbai	30
	3	Charlie	Bangalore	28
	4	David	Delhi	35
	5	Eve	Hyderabad	22

2. Orders

	OrderID	CustomerID	Amount	OrderDate
	-----	-----	-----	-----
	101	1	2500	2024-12-01
	102	2	1800	2024-12-03
	103	1	3200	2025-01-15
	104	3	1500	2025-02-10
	105	4	2700	2025-03-12

QUESTIONS AND THEIR ANSWERS:

Q1. List the names of all customers who live in Delhi.

A1. Query: SELECT Name
FROM customers
WHERE City="Delhi";

Result Grid	
	Name
▶	Alice
	David

Output:

Q2. Find all order with amount greater than 2000.

A2. Query: SELECT *
FROM orders
WHERE Amount>2000;

Result Grid		Filter Rows:		
	OrderID	CustomerID	Amount	OrderDate
▶	101	1	2500	2024-12-01
	103	1	3200	2025-01-15
	105	4	2700	2025-03-12
✱	NULL	NULL	NULL	NULL

Output:

Q3. How many customers are from each city?

A3. Query: SELECT City, COUNT(*) AS CustomerCount
FROM customers
GROUP BY City;

Result Grid		Filter Rows:	
	City	CustomerCount	
▶	Delhi	2	
	Mumbai	1	
	Bangalore	1	
	Hyderabad	1	

Output:

Q4. What is the total amount spent by customer 'Alice'?

A4. Query: SELECT SUM(Amount) AS TotalSpent
FROM orders
WHERE CustomerID =

(SELECT CustomerID FROM customers WHERE Name="Alice");

Result Grid	
	TotalSpent
▶	5700

Output:

Q5. List all customers who have placed at least one order.

A5. Query: SELECT DISTINCT customers.Name

FROM customers

JOIN orders ON customers.CustomerID = orders.CustomerID;

Result Grid	
	Name
▶	Alice
	Bob
	Charlie
	David

Output:

Q6. Get the average age of customers who have placed order.

A6. Query: SELECT AVG(Age) AS AvgAge

FROM customers

WHERE CustomerID IN (

SELECT DISTINCT CustomerID FROM orders

);

Result Grid	
	AvgAge
▶	29.5000

Output:

Q7. List customers names and their total number of orders.

A7. Query: SELECT customers.Name, COUNT(orders.OrderID) AS OrderCount

FROM customers

JOIN orders ON customers.CustomerID = orders.CustomerID

GROUP BY customers.Name;

Result Grid			Filter Rows
	Name	OrderCount	
▶	Alice	2	
	Bob	1	
	Charlie	1	
	David	1	

Output:

QUERY OF SQL ON MYSQL WORKBENCH:

```
CREATE DATABASE bootcamp_project;
```

```
USE bootcamp_project;
```

```
CREATE TABLE customers(
```

```
CustomerID INT PRIMARY KEY,
```

```
Name VARCHAR(50),
```

```
City VARCHAR(20),
```

```
Age INT
```

```
);
```

```
INSERT INTO customers
```

```
(CustomerID, Name, City, Age)
```

```
VALUES
```

```
(1, "Alice", "Delhi", 25),
```

```
(2, "Bob", "Mumbai", 30),
```

```
(3, "Charlie", "Bangalore", 28),
```

```
(4, "David", "Delhi", 35),
```

```
(5, "Eve", "Hyderabad", 22);
```

```
SELECT * FROM customers;
```

```
CREATE TABLE orders(
```

```
OrderID INT PRIMARY KEY,
```

```
CustomerID INT,
```

```
Amount FLOAT,
```

```
OrderDate DATE,  
FOREIGN KEY(CustomerID) REFERENCES customers(CustomerID)  
);  
  
INSERT INTO orders  
(OrderId, CustomerID, Amount, OrderDate)  
VALUES  
(101, 1, 2500, "2024-12-01"),  
(102, 2, 1800, "2024-12-03"),  
(103, 1, 3200, "2025-01-15"),  
(104, 3, 1500, "2025-02-10"),  
(105, 4, 2700, "2025-03-12");  
  
SELECT * FROM orders;
```

#question 1

```
SELECT Name  
FROM customers  
WHERE City="Delhi";
```

#question 2

```
SELECT *  
FROM orders  
WHERE Amount>2000;
```

#question 3

```
SELECT City, COUNT(*) AS CustomerCount  
FROM customers  
GROUP BY City;
```

#question 4

```
SELECT SUM(Amount) AS TotalSpent
FROM orders
WHERE CustomerID = (SELECT CustomerID FROM customers WHERE Name="Alice");
```

#question 5

```
SELECT DISTINCT customers.Name
FROM customers
JOIN orders ON customers.CustomerID = orders.CustomerID;
```

#question 6

```
SELECT AVG(Age) AS AvgAge
FROM customers
WHERE CustomerID IN (
SELECT DISTINCT CustomerID FROM orders
);
```

#question 7

```
SELECT customers.Name, COUNT(orders.OrderID) AS OrderCount
FROM customers
JOIN orders ON customers.CustomerID = orders.CustomerID
GROUP BY customers.Name;
```

NAME: SUMAN PANI

EMAIL ID: sumanpani19@gmail.com

CONTACT: +91 9654310434