SQL EXAM

1. Create Database

```
CREATE database AxiaStores;
```

2.i. Create a table named CustomerTB

```
CREATE TABLE CustomerTB (
CustomerID INT PRIMARY KEY,
FirstName VARCHAR (50),
LastName VARCHAR (50),
Email VARCHAR (100),
Phone VARCHAR (20),
City VARCHAR (50));
```

Insert records

```
INSERT INTO CustomerTB (CustomerID, FirstName, LastName, Email, Phone, City)
VALUES
(1, 'Musa', 'Ahmed', 'musa.ahmed@hotmail.com', '0803-123-0001', 'Lagos'),
(2, 'Ray', 'Samson', 'ray.samson@yahoo.com', '0803-123-0002', 'Ibadan'),
(3, 'Chinedu','Okafor', 'chinedu.ok@yahoo.com', '0803-123-0003', 'Enugu'),
(4, 'Dare', 'Adewale', 'dare.ad@hotmail.com', '0803-123-0004', 'Abuja'),
(5, 'Efe', 'Ojo', 'efe.oj@gmail.com', '0803-123-0005', 'Port Harcourt'),
(6, 'Aisha', 'Bello', 'aisha.bello@hotmail.com', '0803-123-0006', 'Kano'),
(7, 'Tunde', 'Salami', 'tunde.salami@yahoo.com', '0803-123-0007', 'Ilorin'),
(8, 'Nneka', 'Umeh', 'nneka.umeh@gmail.com', '0803-123-0008', 'Owerri'),
(9, 'Kelvin', 'Peters', 'kelvin.peters@hotmail.com', '0803-123-0009', 'Asaba'),
(10, 'Blessing', 'Mark', 'blessing.mark@gmail.com', '0803-123-0010', 'Uyo');
```

2. ii. Create a table named ProductTB

```
CREATE TABLE ProductTB (
ProductID INT PRIMARY KEY,
ProductName VARCHAR(50),
Category VARCHAR(50),
UnitPrice DECIMAL(8,2),
StockQty INT
);
```

Insert records

```
INSERT INTO ProductTB (ProductID, ProductName, Category, UnitPrice, StockQty)
VALUES
(1, 'Wireless Mouse', 'Accessories', 7500, 120),
(2, 'USB-C Charger 65W', 'Electronics', 14500, 75),
(3, 'Noise-Cancel Headset', 'Audio', 85500, 50),
(4, '27" 4K Monitor', 'Displays', 185000, 20),
(5, 'Laptop Stand', 'Accessories', 19500, 90),
(6, 'Bluetooth Speaker', 'Audio', 52000, 60),
(7, 'Mechanical Keyboard', 'Accessories', 18500, 40),
(8, 'WebCam 1080p', 'Electronics', 25000, 55),
(9, 'Smartwatch Series 5', 'Wearables', 320000, 30),
(10, 'Portable SSD 1TB', 'Storage', 125000, 35);
```

2. iii. Create a table named OrdersTB

```
CREATE TABLE OrdersTB (
  OrderID INT PRIMARY KEY,
  CustomerID INT,
  ProductID INT,
  OrderDate DATE,
  Quantity INT,
  FOREIGN KEY (CustomerID) REFERENCES CustomerTB(CustomerID),
  FOREIGN KEY (ProductID) REFERENCES ProductTB(ProductID)
);
```

Insert Records

```
INSERT INTO OrdersTB (OrderID, CustomerID, ProductID, OrderDate, Quantity)
VALUES
(1001, 1, 3, '2025-06-01', 1),
(1002, 2, 1, '2025-06-03', 2),
(1003, 3, 5, '2025-06-05', 1),
(1004, 4, 4, '2025-06-10', 1),
(1005, 5, 2, '2025-06-12', 3),
(1006, 6, 7, '2025-06-15', 1),
(1007, 7, 6, '2025-06-18', 2),
(1008, 8, 8, '2025-06-20', 1),
(1009, 9, 9, '2025-06-22', 1),
(1010, 10, 10, '2025-06-25', 2);
```

4. Return the FirstName and Email of every customer who has ever purchased the product “Wireless Mouse”.

```
SELECT CustomerTB.FirstName, CustomerTB.Email
FROM CustomerTB
JOIN OrdersTB ON CustomerTB.CustomerID = OrdersTB.CustomerID
JOIN ProductTB ON OrdersTB.ProductID = ProductTB.ProductID
WHERE ProductTB.ProductName = 'Wireless Mouse';
```

OUTPUT:

FirstName	Email
Ray	ray.samson@yahoo.com

5. List all customers’ full names in ascending alphabetical order (LastName, then FirstName)

```
SELECT LastName + ' ' + FirstName AS FullName
FROM CustomerTB
ORDER BY LastName ASC, FirstName ASC;
```

OUTPUT:

FullName
Adewale Dare
Ahmed Musa
Bello Aisha
Mark Blessing
Ojo Efe
Okafor Chinedu
Peters Kelvin
Salami Tunde
Samson Ray
Umeh Nneka

6. Show every order together with the customer's full name, the product name, quantity, unit price, total price (quantity × unit price), and order date.

```
SELECT
  CustomerTB.FirstName + ' ' + CustomerTB.LastName AS FullName,
  ProductTB.ProductName,
  OrdersTB.Quantity,
  ProductTB.UnitPrice,
  (OrdersTB.Quantity * ProductTB.UnitPrice) AS TotalPrice,
  OrdersTB.OrderDate
FROM OrdersTB
JOIN CustomerTB ON OrdersTB.CustomerID = CustomerTB.CustomerID
JOIN ProductTB ON OrdersTB.ProductID = ProductTB.ProductID;
```

OUTPUT:

FullName	ProductName	Quantity	UnitPrice	TotalPrice	OrderDate
Musa Ahmed	Noise-Cancel Headset	1	85500.00	85500.00	2025-06-01
Ray Samson	Wireless Mouse	2	7500.00	15000.00	2025-06-03
Chinedu Okafor	Laptop Stand	1	19500.00	19500.00	2025-06-05
Dare Adewale	27" 4K Monitor	1	185000.00	185000.00	2025-06-10
Efe Ojo	USB-C Charger 65W	3	14500.00	43500.00	2025-06-12
Aisha Bello	Mechanical Keyboard	1	18500.00	18500.00	2025-06-15
Tunde Salami	Bluetooth Speaker	2	52000.00	104000.00	2025-06-18
Nneka Umeh	WebCam 1080p	1	25000.00	25000.00	2025-06-20
Kelvin Peters	Smartwatch Series 5	1	320000.00	320000.00	2025-06-22

Blessing Mark Portable SSD 1TB 2 125000.00 250000.00 2025-06-25

7. Show average sales per product category and sort in descending order

```
SELECT
  ProductTB.Category,
  AVG(OrdersTB.Quantity * ProductTB.UnitPrice) AS AverageSales
FROM OrdersTB
JOIN ProductTB ON OrdersTB.ProductID = ProductTB.ProductID
GROUP BY ProductTB.Category
ORDER BY AverageSales DESC;
```

OUTPUT:

Category	AverageSales
Wearables	320000.000000
Storage	250000.000000
Displays	185000.000000
Audio	94750.000000
Electronics	34250.000000
Accessories	17666.666666

8. Which city generated the highest revenue for AxiaStores?

```
SELECT TOP 1
  CustomerTB.City,
  SUM(OrdersTB.Quantity * ProductTB.UnitPrice) AS TotalRevenue
FROM OrdersTB
JOIN ProductTB
  ON OrdersTB.ProductID = ProductTB.ProductID
JOIN CustomerTB
  ON OrdersTB.CustomerID = CustomerTB.CustomerID
GROUP BY CustomerTB.City
ORDER BY TotalRevenue DESC;
```

OUTPUT:

City	TotalRevenue
Asaba	320000.00