SQL Queries: Create following tables with suitable constraints (primary key, foreign key, not null etc). Insert record and solve the following queries: Create table Cust_Master(Cust_no, Cust_name, Cust_addr) Create table Order(Order_no, Cust_no, Order_date, Qty_Ordered) Create Product (Product_no, Product_name, Order_no)

1. List names of customers having 'A' as second letter in their name.

2. Display order from Customer no C1002, C1005, C1007 and C1008

3. List Clients who stay in either 'Banglore or 'Manglore'

4. Display name of customers& the product_name they have purchase

5. Create view View1 consisting of Cust_name, Product_name.

6. Disply product_name and quantity purchase by each customer

7. Perform different joint operation.

```
-- Create Customer Master Table
CREATE TABLE Cust_Master (
    Cust_no VARCHAR(10) PRIMARY KEY,
    Cust_name VARCHAR(50) NOT NULL,
    Cust_addr VARCHAR(100) NOT NULL
);

-- Create Order Table
CREATE TABLE Orders (
    Order_no INT PRIMARY KEY,
    Cust_no VARCHAR(10),
    Order_date DATE NOT NULL,
    Qty_Ordered INT CHECK (Qty_Ordered > 0),
    FOREIGN KEY (Cust_no) REFERENCES Cust_Master(Cust_no)
        ON DELETE CASCADE ON UPDATE CASCADE
);

-- Create Product Table
CREATE TABLE Product (
    Product_no INT PRIMARY KEY,
    Product_name VARCHAR(50) NOT NULL,
    Order_no INT,
    FOREIGN KEY (Order_no) REFERENCES Orders(Order_no)
        ON DELETE CASCADE ON UPDATE CASCADE
);
```

```
-- Insert into Customer Master
INSERT INTO Cust_Master VALUES
('C1001', 'Ramesh', 'Pune'),
('C1002', 'Aarti', 'Banglore'),
('C1003', 'Kamal', 'Manglore'),
('C1004', 'Neha', 'Delhi'),
('C1005', 'Manish', 'Mumbai'),
('C1006', 'Anita', 'Banglore'),
('C1007', 'Sagar', 'Manglore'),
```

```
('C1008', 'Pawan', 'Pune');
```

-- Insert into Orders
```
INSERT INTO Orders VALUES
(201, 'C1001', '2024-02-10', 3),
(202, 'C1002', '2024-02-15', 5),
(203, 'C1005', '2024-03-01', 4),
(204, 'C1007', '2024-03-08', 2),
(205, 'C1008', '2024-04-10', 1);
```

-- Insert into Product
```
INSERT INTO Product VALUES
(301, 'Laptop', 201),
(302, 'Mobile', 202),
(303, 'Tablet', 203),
(304, 'Headphones', 204),
(305, 'Keyboard', 205);
```

Step 7: Test the Queries

✅ **Query 1 – list names of customers having 'A' as second letter in their name.**
```
SELECT Cust_name
FROM Cust_Master
WHERE Cust_name LIKE '_A%';
```

Query 2 – Display orders from Customer no C1002, C1005, C1007 and C1008
```
SELECT *FROM Orders
WHERE Cust_no IN ('C1002', 'C1005', 'C1007', 'C1008');
```

Query 3 – List Clients who stay in either 'Banglore' or 'Manglore'
```
SELECT Cust_name, Cust_addr
FROM Cust_Master
WHERE Cust_addr IN ('Banglore', 'Manglore');
```

Query 4 – Display name of customers & the product_name they have purchased
```
SELECT c.Cust_name, p.Product_name
FROM Cust_Master c
JOIN Orders o ON c.Cust_no = o.Cust_no
JOIN Product p ON o.Order_no = p.Order_no;
```

Query 5 – Create view View1 consisting of Cust_name and Product_name
```
CREATE OR REPLACE VIEW View1 AS
SELECT c.Cust_name, p.Product_name
FROM Cust_Master c
JOIN Orders o ON c.Cust_no = o.Cust_no
JOIN Product p ON o.Order_no = p.Order_no;
```

```
SELECT * FROM View1;
```

Query 6- Display product_name and quantity purchased by each customer

```sql
SELECT c.Cust_name, p.Product_name, o.Qty_Ordered
FROM Cust_Master c
JOIN Orders o ON c.Cust_no = o.Cust_no
JOIN Product p ON o.Order_no = p.Order_no;
```

Query 7-Perform different join operations
   a) Inner Join

```sql
SELECT c.Cust_name, p.Product_name
FROM Cust_Master c
INNER JOIN Orders o ON c.Cust_no = o.Cust_no
INNER JOIN Product p ON o.Order_no = p.Order_no;
```

b) Left Join

```sql
SELECT c.Cust_name, p.Product_name
FROM Cust_Master c
LEFT JOIN Orders o ON c.Cust_no = o.Cust_no
LEFT JOIN Product p ON o.Order_no = p.Order_no;
```

c) Right Join

```sql
SELECT c.Cust_name, p.Product_name
FROM Cust_Master c
RIGHT JOIN Orders o ON c.Cust_no = o.Cust_no
RIGHT JOIN Product p ON o.Order_no = p.Order_no;
```