

## S4

### Problem Statement:

Tables: Cust\_Master(Cust\_no, Cust\_name, Cust\_addr), Order(Order\_no, Cust\_no, Order\_date, Qty\_Ordered), Product(Product\_no, Product\_name, Order\_no). Queries: customers with 'A' as second letter, orders for specific customers, clients in Bangalore or Mangalore, customer & product, view, product & qty, joins.

### Code:

```
-- S4: Create tables and queries (MySQL)
CREATE TABLE Cust_Master (
    cust_no VARCHAR(10) PRIMARY KEY,
    cust_name VARCHAR(150),
    cust_addr VARCHAR(255)
);

CREATE TABLE `OrderTable` (
    order_no VARCHAR(20) PRIMARY KEY,
    cust_no VARCHAR(10),
    order_date DATE,
    qty_ordered INT,
    FOREIGN KEY (cust_no) REFERENCES Cust_Master(cust_no)
);

CREATE TABLE Product (
    product_no VARCHAR(20) PRIMARY KEY,
    product_name VARCHAR(150),
    order_no VARCHAR(20),
    FOREIGN KEY (order_no) REFERENCES `OrderTable`(order_no)
);

-- 1. Customers having 'A' as second letter
SELECT cust_name FROM Cust_Master WHERE cust_name LIKE '_A%';

-- 2. Orders from customers C1002, C1005, C1007, C1008
SELECT * FROM `OrderTable` WHERE cust_no IN ('C1002','C1005','C1007','C1008');

-- 3. Clients in Bangalore or Mangalore
SELECT * FROM Cust_Master WHERE cust_addr LIKE '%Bangalore%' OR cust_addr LIKE '%Mangalore%';

-- 4. Customer name & product_name they purchased
SELECT c.cust_name, p.product_name
FROM Cust_Master c
JOIN `OrderTable` o ON c.cust_no = o.cust_no
JOIN Product p ON o.order_no = p.order_no;

-- 5. View View1
CREATE VIEW View1 AS
SELECT c.cust_name, p.product_name
FROM Cust_Master c
JOIN `OrderTable` o ON c.cust_no = o.cust_no
JOIN Product p ON o.order_no = p.order_no;

-- 6. Product_name and quantity purchased by each customer
SELECT c.cust_name, p.product_name, o.qty_ordered
FROM Cust_Master c
JOIN `OrderTable` o ON c.cust_no = o.cust_no
```

```
JOIN Product p ON o.order_no = p.order_no;
```

```
-- 7. Join examples
```

```
-- Inner join:
```

```
SELECT c.cust_name, p.product_name FROM Cust_Master c JOIN `OrderTable` o ON c.cust_no=o.cust_no  
JOIN Product p ON o.order_no=p.order_no;
```

```
-- Left join:
```

```
SELECT c.cust_name, p.product_name FROM Cust_Master c LEFT JOIN `OrderTable` o ON  
c.cust_no=o.cust_no LEFT JOIN Product p ON o.order_no=p.order_no;
```