

## ✅ Step 1: Create Tables

```
-- Create DEPT Table
CREATE TABLE dept (
    deptno VARCHAR(10) PRIMARY KEY,
    dname VARCHAR(50),
    mgreno INT
);

-- Create EMP Table
CREATE TABLE emp (
    eno INT PRIMARY KEY,
    ename VARCHAR(50),
    bdate DATE,
    title VARCHAR(20),
    salary INT,
    deptno VARCHAR(10),
    FOREIGN KEY (deptno) REFERENCES dept(deptno)
);

-- Create PROJ Table
CREATE TABLE proj (
    pno INT PRIMARY KEY,
    pname VARCHAR(50),
    budget INT,
    deptno VARCHAR(10),
    FOREIGN KEY (deptno) REFERENCES dept(deptno)
);

-- Create WORKSON Table
CREATE TABLE workson (
    eno INT,
    pno INT,
    responsibility VARCHAR(30),
    hours INT,
    FOREIGN KEY (eno) REFERENCES emp(eno),
    FOREIGN KEY (pno) REFERENCES proj(pno)
);
```

## ✅ Step 2: Insert Sample Data

```
-- Insert into dept
```

```

INSERT INTO dept (deptno, dname, mgreno) VALUES
('D1', 'Production', 101),
('D2', 'Design', 102),
('D3', 'Marketing', 103);

-- Insert into emp
INSERT INTO emp (eno, ename, bdate, title, salary, deptno) VALUES
(201, 'Alice', '1990-05-14', 'EE', 40000, 'D1'),
(202, 'Bob', '1988-08-23', 'SA', 36000, 'D1'),
(203, 'Charlie', '1992-11-05', 'SE', 30000, 'D2'),
(204, 'David', '1985-01-30', 'Manager', 55000, 'D3');

-- Insert into proj
INSERT INTO proj (pno, pname, budget, deptno) VALUES
(1, 'ProjA', 120000, 'D1'),
(2, 'ProjB', 95000, 'D2'),
(3, 'ProjC', 200000, 'D3');

-- Insert into workson
INSERT INTO workson (eno, pno, responsibility, hours) VALUES
(201, 1, 'Developer', 20),
(202, 1, 'Manager', 8),
(203, 2, 'Tester', 15),
(204, 3, 'Manager', 12);

```

### **1) Project number and name for projects with budget > Rs.100,000**

```

SELECT pno, pname
FROM proj
WHERE budget > 100000;

```

### **2) All workson records where hours < 10 and responsibility is 'Manager'**

```

SELECT *
FROM workson
WHERE hours < 10 AND responsibility = 'Manager';

```

### **3) Employees (eno and ename) with title 'EE' or 'SA' and salary > Rs.35,000**

```

SELECT eno, ename
FROM emp
WHERE (title = 'EE' OR title = 'SA') AND salary > 35000;

```

### **4) Employee names in department 'D1' ordered by decreasing salary**

```
SELECT ename  
FROM emp  
WHERE deptno = 'D1'  
ORDER BY salary DESC;
```

**5) Manager number whose department name is “Production”**

```
SELECT mgreno  
FROM dept  
WHERE dname = 'Production';
```