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SUBJECT: Database Management System
BRANCH: CSE
SEM: 5th
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Q1. Consider the schema:

EMPLOYEE (EmpID#, Empname, DOB, State, City, Street)

WORKS (EmpID#, CompanyName, Salary)

LOCATION (CompanyName#, City#)

MANAGES (ManagerEMPID#, EmpID#)

CREATE STATEMENTS:

1. EMPLOYEE Table

```
CREATE TABLE EMPLOYEE (  
    EmpID INT PRIMARY KEY,  
    Empname VARCHAR(100) NOT NULL,  
    DOB DATE NOT NULL,  
    State VARCHAR(50),  
    City VARCHAR(50),  
    Street VARCHAR(100)  
);
```

2. WORKS Table

```
CREATE TABLE WORKS (  
    EmpID INT PRIMARY KEY,  
    CompanyName VARCHAR(100) NOT NULL,  
    Salary DECIMAL(10, 2),  
    FOREIGN KEY (EmpID) REFERENCES EMPLOYEE(EmpID)  
);
```

3. LOCATION Table

```
CREATE TABLE LOCATION (  
    CompanyName VARCHAR(100) PRIMARY KEY,  
    City VARCHAR(50) NOT NULL  
);
```

4. MANAGES Table

```
CREATE TABLE MANAGES (  
    ManagerEMPID INT NOT NULL,  
    EmpID INT PRIMARY KEY,  
    FOREIGN KEY (ManagerEMPID) REFERENCES EMPLOYEE(EmpID),  
    FOREIGN KEY (EmpID) REFERENCES EMPLOYEE(EmpID)  
);
```

DISPLAY EACH TABLE:

1. EMPLOYEE Table

SELECT * FROM EMPLOYEE;

EmpID	Empname	DOB	State	City	Street
1	Alice	1990-01-15	Karnataka	Bangalore	Brigade Road
2	Bob	1985-07-22	Maharashtra	Mumbai	Marine Drive
3	Charlie	1992-03-09	Karnataka	Bangalore	Brigade Road
4	Diana	1993-12-01	Maharashtra	Pune	FC Road
5	Frank	1988-11-10	Gujarat	Ahmedabad	Ashram Road
6	Grace	1990-05-05	Gujarat	Ahmedabad	Ashram Road
7	Hannah	1987-03-14	Maharashtra	Mumbai	Andheri East
8	Ivy	1991-06-25	Karnataka	Bangalore	Indiranagar

2. WORKS Table

SELECT * FROM WORKS;

EmpID	CompanyName	Salary
1	TechCorp	70000.00
2	MediLife	60000.00
3	TechCorp	75000.00
4	InnoSoft	50000.00
5	RELIANCE_SHOP	95000.00
6	RELIANCE_SHOP	88000.00
7	RELIANCE_SHOP	55000.00
8	RELIANCE_SHOP	60000.00

3. LOCATION Table

SELECT * FROM LOCATION;

CompanyName	City
InnoSoft	Pune
MediLife	Mumbai
RELIANCE_SHOP	Ahmedabad
TechCorp	Bangalore

4. MANAGES Table

SELECT * FROM MANAGES;

ManagerEMPID	EmpID
1	3
2	4
5	6

Write the SQL statements.

- a) Find the names of all the employees who have born on Monday and live in the same city as company for which they work.

```
SELECT E.Empname
FROM EMPLOYEE E
JOIN WORKS W ON E.EmpID = W.EmpID
JOIN LOCATION L ON W.CompanyName = L.CompanyName
WHERE TO_CHAR(E.DOB, 'Day') = 'Monday'
AND E.City = L.City;
```

Empname
Alice
Bob
Charlie

- b) Find the names of all the employees who live in the same city and on same street as their manager.

```
SELECT E.Empname
FROM EMPLOYEE E
JOIN MANAGES M ON E.EmpID = M.EmpID
JOIN EMPLOYEE MGR ON M.ManagerEMPID = MGR.EmpID
WHERE E.City = MGR.City
AND E.Street = MGR.Street;
```

Empname
Charlie
Grace

- c) Find the details of all employees who are the top THREE salary taker in RELIANCE_SHOP

```
SELECT EmpID, Empname, Salary
FROM (
  SELECT E.EmpID, E.Empname, W.Salary
  FROM EMPLOYEE E
  JOIN WORKS W ON E.EmpID = W.EmpID
  WHERE W.CompanyName = 'RELIANCE_SHOP'
  ORDER BY W.Salary DESC
)
WHERE ROWNUM <= 3;
```

EmpID	Empname	Salary
5	Frank	95000.00
6	Grace	88000.00
8	Ivy	60000.00