LAB 4

ER DIAGRAM AND QUERIES

```
create database Employee;
use Employee;
CREATE TABLE Department (
  Dept No INT PRIMARY KEY,
  Dept Name VARCHAR(50),
  Dept Location VARCHAR(50)
);
CREATE TABLE Employee (
  Emp No INT PRIMARY KEY,
  Emp Name VARCHAR(50),
  Job Role VARCHAR(50),
  Dept No INT,
  FOREIGN KEY (Dept No) REFERENCES Department(Dept No)
);
CREATE TABLE Project (
  Proj_No INT PRIMARY KEY,
  Proj Name VARCHAR(50),
  Proj Location VARCHAR(50),
  Dept No INT,
  FOREIGN KEY (Dept No) REFERENCES Department(Dept No)
);
```

```
CREATE TABLE Incentives (
  Incentive ID INT PRIMARY KEY,
  Emp No INT,
  Incentive Date DATE,
  Amount DECIMAL(10,2),
  FOREIGN KEY (Emp No) REFERENCES Employee(Emp No)
);
CREATE TABLE Works On (
  Emp No INT,
  Proj No INT,
  PRIMARY KEY (Emp No, Proj No),
  FOREIGN KEY (Emp No) REFERENCES Employee(Emp No),
  FOREIGN KEY (Proj No) REFERENCES Project(Proj No)
);
INSERT INTO Department VALUES
(1, 'HR', 'Bengaluru'),
(2, 'IT', 'Hyderabad'),
(3, 'Finance', 'Mysuru'),
(4, 'Admin', 'Chennai'),
(5, 'R&D', 'Bengaluru');
INSERT INTO Employee VALUES
(101, 'Asha', 'Manager', 1),
(102, 'Kiran', 'Analyst', 2),
(103, 'Ravi', 'Clerk', 3),
(104, 'Manu', 'Developer', 2),
```

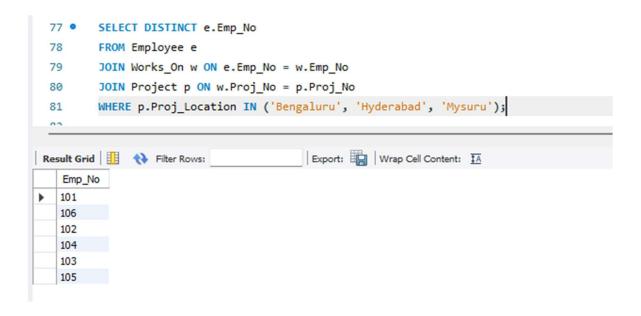
```
(105, 'Deepa', 'Tester', 5),
(106, 'Rohit', 'HR Executive', 1);
INSERT INTO Project VALUES
(201, 'Payroll System', 'Bengaluru', 1),
(202, 'ERP Implementation', 'Hyderabad', 2),
(203, 'Tax Portal', 'Mysuru', 3),
(204, 'Automation', 'Chennai', 4),
(205, 'AI Tool', 'Bengaluru', 5);
INSERT INTO Works On VALUES
(101, 201),
(102, 202),
(103, 203),
(104, 202),
(105, 205),
(106, 201);
INSERT INTO Incentives VALUES
(1, 101, '2019-01-10', 2000),
(2, 102, '2019-01-15', 1500),
(3, 103, '2019-01-18', 1000),
(4, 105, '2019-01-20', 1800);
Queries
3.
SELECT DISTINCT e.Emp No
```

FROM Employee e

JOIN Works On w ON e.Emp No = w.Emp No

JOIN Project p ON w.Proj No = p.Proj No

WHERE p.Proj Location IN ('Bengaluru', 'Hyderabad', 'Mysuru');

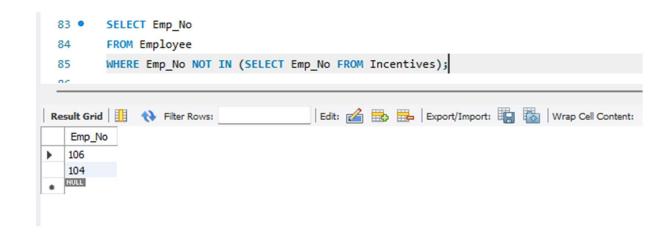


4.

SELECT Emp_No

FROM Employee

WHERE Emp_No NOT IN (SELECT Emp_No FROM Incentives);



5.

SELECT e.Emp_Name, e.Emp_No, d.Dept_Name, e.Job_Role, d.Dept_Location, p.Proj_Location

FROM Employee e

JOIN Department d ON e.Dept No = d.Dept No

JOIN Project p ON e.dept No = p.dept No

WHERE d.Dept Location = p.Proj Location;

