

```
-- Create Database
CREATE DATABASE Employee;

USE Employee;

-- Create Department Table
CREATE TABLE Dept (
    DeptNo INT PRIMARY KEY,
    Dname VARCHAR(30),
    Dloc VARCHAR(50)
);

-- Create Employee Table
CREATE TABLE Employee (
    Eno INT PRIMARY KEY,
    Ename VARCHAR(30) NOT NULL,
    Mgr_No INT,
    Hiredate DATE,
    Sal DECIMAL(10,2),
    DeptNo INT,
    FOREIGN KEY (DeptNo) REFERENCES Dept(DeptNo)
);

-- Create Project Table
CREATE TABLE Project (
    Pno INT PRIMARY KEY,
    Pname VARCHAR(30),
    Ploc VARCHAR(50)
);

-- Create AssignedTo Table (junction table)
CREATE TABLE AssignedTo (
```

```
Eno INT,  
Pno INT,  
JobRole VARCHAR(50),  
PRIMARY KEY (Eno, Pno),  
FOREIGN KEY (Eno) REFERENCES Employee(Eno),  
FOREIGN KEY (Pno) REFERENCES Project(Pno)  
);
```

```
-- Create Incentive Table  
CREATE TABLE Incentive (  
Eno INT,  
Incentive_Date DATE,  
Incentive_Amount DECIMAL(10,2),  
FOREIGN KEY (Eno) REFERENCES Employee(Eno)  
);
```

```
-- Insert values into Dept  
INSERT INTO Dept (DeptNo, Dname, Dloc)  
VALUES  
(10, 'HR', 'Mysore'),  
(20, 'IT', 'Bangalore'),  
(30, 'Finance', 'Delhi'),  
(40, 'Marketing', 'Chennai'),  
(50, 'Operations', 'Hyderabad');
```

```
-- Insert values into Employee  
INSERT INTO Employee (Eno, Ename, Mgr_No, Hiredate, Sal, DeptNo)  
VALUES  
(101, 'Rajesh', NULL, '2019-04-12', 55000.00, 10),  
(102, 'Sneha', 101, '2020-07-13', 48000.00, 20),  
(103, 'Kiran', 101, '2021-01-25', 42000.00, 30),
```

```
(104, 'Priya', 103, '2022-04-14', 39000.00, 40),  
(105, 'Arjun', 103, '2023-11-15', 38000.00, 50);
```

-- Insert values into Project

```
INSERT INTO Project (Pno, Pname, Ploc)
```

VALUES

```
(1, 'Recruitment', 'Mysore'),  
(2, 'ERP Upgrade', 'Bangalore'),  
(3, 'Audit System', 'Delhi'),  
(4, 'Product Launch', 'Chennai'),  
(5, 'Logistic Hub', 'Hyderabad');
```

-- Insert values into AssignedTo

```
INSERT INTO AssignedTo (Eno, Pno, JobRole)
```

VALUES

```
(101, 1, 'Project Manager'),  
(102, 2, 'Software Engineer'),  
(103, 3, 'Analyst'),  
(104, 4, 'Accountant'),  
(105, 5, 'Coordinator');
```

-- Insert values into Incentive

```
INSERT INTO Incentive (Eno, Incentive_Date, Incentive_Amount)
```

VALUES

```
(101, '2024-02-10', 5000.00),  
(102, '2024-06-25', 3000.00),  
(103, '2024-07-18', 2800.00),  
(104, '2024-09-12', 2800.00),  
(105, '2024-12-05', 3200.00);
```

-- Display Data

```
SELECT * FROM Dept;  
SELECT * FROM Employee;  
SELECT * FROM Project;  
SELECT * FROM AssignedTo;  
SELECT * FROM Incentive;  
Drop database employee;
```

-- Queries

```
-- query1:  
select e.Eno,e.Ename,d.Dname,d.Dloc  
from Employee e  
Join Dept d On e.DeptNo = d.DeptNo;
```

	Eno	Ename	Dname	Dloc
▶	101	Rajesh	HR	Mysore
	102	Sneha	IT	Bangalore
	103	Kiran	Finance	Delhi
	104	Priya	Marketing	Chennai
	105	Arjun	Operations	Hyderabad

```
-- query2:  
SELECT e.Eno, e.Ename  
FROM Employee e  
LEFT JOIN AssignedTo a ON e.Eno = a.Eno  
WHERE a.Pno IS NULL;
```

	Eno	Ename

```
SELECT p.Pname, COUNT(a.Eno) AS HEADCOUNT  
FROM Project p  
LEFT JOIN AssignedTo a ON p.Pno = a.Pno  
GROUP BY p.Pname;
```

Result Grid | Filter Rows:

	Pname	HEADCOUNT
▶	Recruitment	1
	ERP Upgrade	1
	Audit System	1
	Product Launch	1
	Logistic Hub	1

-- query3:

```
SELECT d.Dname,
       AVG(e.Sal) AS AVG_SALARY,
       MAX(e.Sal) AS MAX_SALARY
  FROM Employee e
 JOIN Dept d ON e.DeptNo = d.DeptNo
 GROUP BY d.Dname;
```

Result Grid | Filter Rows:  Ex

	Dname	AVG_SALARY	MAX_SALARY
▶	HR	55000.000000	55000.00
	IT	48000.000000	48000.00
	Finance	42000.000000	42000.00
	Marketing	39000.000000	39000.00
	Operations	38000.000000	38000.00

-- query4:

```
SELECT E.Eno, E.Ename, SUM(I.Incentive_Amount) AS Total_Incentives
  FROM Employee E
 JOIN Incentive I ON E.Eno = I.Eno
 GROUP BY E.Eno, E.Ename;
```

Result Grid | Filter Rows:

	Eno	Ename	Total_Incentives
▶	101	Rajesh	5000.00
	102	Sneha	3000.00
	103	Kiran	2800.00
	104	Priya	2800.00
	105	Arjun	3200.00

-- query 5:

```

SELECT E.Eno, E.Ename
FROM Employee E
JOIN AssignedTo A ON E.Eno = A.Eno
JOIN Project P ON A.Pno = P.Pno
WHERE P.Pname = 'Recruitment';

```

-- query 6:

	Result Grid			Filter Row
	Eno	Ename		
▶	101	Rajesh		

```

SELECT D.DeptNo, D.Dname
FROM Dept D
LEFT JOIN Employee E ON D.DeptNo = E.DeptNo
WHERE E.Eno IS NULL;

```

-- query 7:

```

SELECT M.Eno AS Manager_ID, M.Ename AS Manager_Name, COUNT(E.Eno) AS Report_Count
FROM Employee M
JOIN Employee E ON M.Eno = E.Mgr_No
GROUP BY M.Eno, M.Ename;

```

-- query 8:

```

SELECT E.Eno, E.Ename, COUNT(A.Pno) AS Project_Count
FROM Employee E
JOIN AssignedTo A ON E.Eno = A.Eno

```

GROUP BY E.Eno, E.Ename

HAVING COUNT(A.Pno) > 1;

	Result Grid			Filter Rows:	<input type="text"/>
	Eno	Ename	Project_Count		