

-- 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;

```

Result Grid				
Filter Rows: <input type="text"/>				
Export: <input type="text"/>				
	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;

```

Result Grid		
Filter Rows: <input type="text"/>		
Export: <input type="text"/>		
	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:

	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;

```

	DeptNo	Dname
--	--------	-------

-- 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;

```

	Manager_ID	Manager_Name	Report_Count
▶	101	Rajesh	2
	103	Kiran	2

-- 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