```
CREATE DATABASE company;
use company;
CREATE TABLE DEPT (
  DEPTNO INT PRIMARY KEY,
  DNAME VARCHAR(50),
 DLOC VARCHAR(50)
);
CREATE TABLE EMPLOYEE (
 EMPNO INT PRIMARY KEY,
  ENAME VARCHAR(50),
  MGR_NO INT,
 HIREDATE DATE,
 SAL DECIMAL(10,2),
 DEPTNO INT,
 FOREIGN KEY (DEPTNO) REFERENCES DEPT(DEPTNO)
);
CREATE TABLE PROJECT (
 PNO INT PRIMARY KEY,
 PNAME VARCHAR(50),
 PLOC VARCHAR(50)
);
CREATE TABLE INCENTIVES (
 EMPNO INT,
 INCENTIVE_DATE DATE,
 INCENTIVE_AMOUNT DECIMAL(10,2),
```

```
FOREIGN KEY (EMPNO) REFERENCES EMPLOYEE(EMPNO)
);
CREATE TABLE ASSIGNED_TO (
  EMPNO INT,
  PNO INT,
  JOB ROLE VARCHAR(50),
  PRIMARY KEY (EMPNO, PNO),
  FOREIGN KEY (EMPNO) REFERENCES EMPLOYEE(EMPNO),
  FOREIGN KEY (PNO) REFERENCES PROJECT(PNO)
);
INSERT INTO DEPT VALUES
(10, 'HR', 'Bengaluru'),
(20, 'IT', 'Hyderabad'),
(30, 'Finance', 'Mysuru'),
(40, 'Marketing', 'Bengaluru'),
(50, 'Research', 'Hyderabad');
INSERT INTO EMPLOYEE VALUES
(101, 'Arun', NULL, '2020-01-10', 50000, 10),
(102, 'Bhavna', 101, '2021-03-15', 60000, 20),
(103, 'Chitra', 101, '2019-07-20', 55000, 30),
(104, 'Deepak', 103, '2022-05-25', 45000, 40),
(105, 'Esha', 102, '2023-06-30', 48000, 50),
(106, 'Farhan', 101, '2024-02-10', 53000, 20);
```

### **INSERT INTO PROJECT VALUES**

- (1, 'Al Research', 'Hyderabad'),
- (2, 'Data Analytics', 'Bengaluru'),
- (3, 'Web Portal', 'Mysuru'),
- (4, 'Cloud Infra', 'Hyderabad'),
- (5, 'E-Commerce', 'Bengaluru');

### INSERT INTO ASSIGNED TO VALUES

```
(101, 2, 'Manager'),
```

(102, 1, 'Developer'),

(103, 3, 'Analyst'),

(104, 5, 'Tester'),

(105, 4, 'Support'),

(106, 1, 'Engineer');

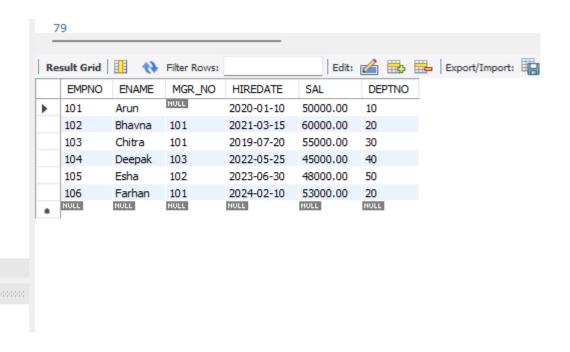
### **INSERT INTO INCENTIVES VALUES**

(101, '2024-04-01', 5000),

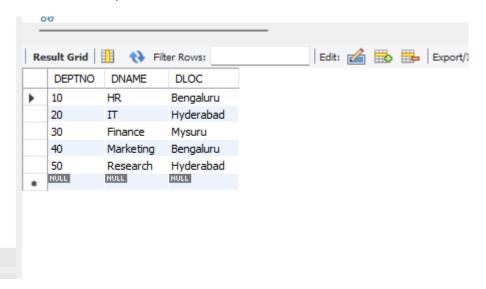
(102, '2024-05-10', 3000),

(104, '2024-08-20', 4000);

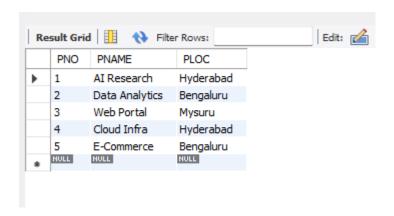
# SELECT \* FROM Employee;



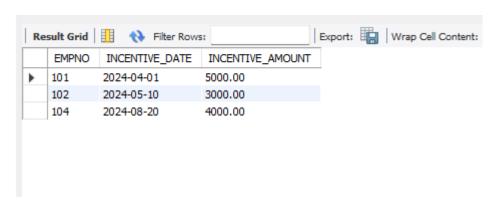
### SELECT \* FROM DEPT;



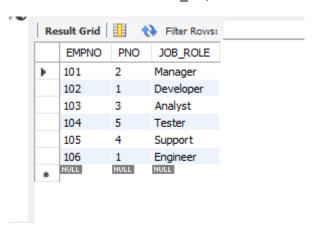
# SELECT \* FROM PROJECT;



# **SELECT \* FROM INCENTIVES;**



# SELECT \* FROM ASSIGNED\_TO;

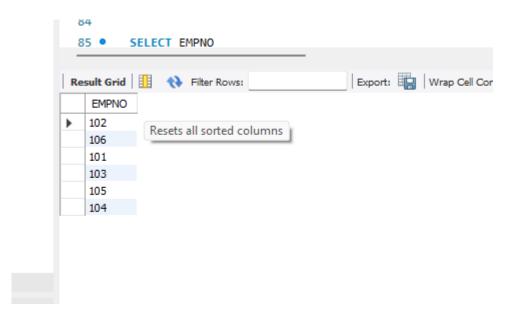


**SELECT DISTINCT A.EMPNO** 

FROM ASSIGNED\_TO A

JOIN PROJECT P ON A.PNO = P.PNO

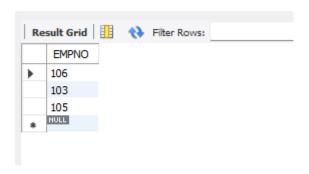
# WHERE P.PLOC IN ('Bengaluru', 'Hyderabad', 'Mysuru');



### **SELECT EMPNO**

### FROM EMPLOYEE

WHERE EMPNO NOT IN (SELECT EMPNO FROM INCENTIVES);



### **SELECT**

E.ENAME,

E.EMPNO,

D.DNAME,

A.JOB\_ROLE,

D.DLOC AS DEPT\_LOCATION,

P.PLOC AS PROJECT\_LOCATION

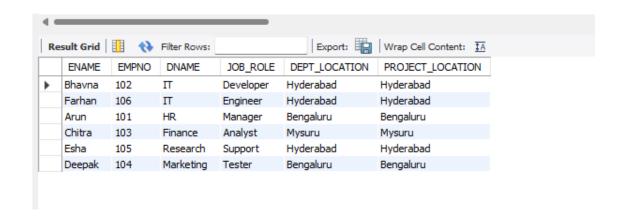
FROM EMPLOYEE E

JOIN DEPT D ON E.DEPTNO = D.DEPTNO

JOIN ASSIGNED\_TO A ON E.EMPNO = A.EMPNO

JOIN PROJECT P ON A.PNO = P.PNO

WHERE D.DLOC = P.PLOC;



SELECT E1.ENAME AS MANAGER\_NAME, COUNT(E2.EMPNO) AS EMPLOYEE\_COUNT
FROM EMPLOYEE E1

JOIN EMPLOYEE E2 ON E1.EMPNO = E2.MGR\_NO

GROUP BY E1.ENAME

HAVING COUNT(E2.EMPNO) = (

SELECT MAX(EMP\_COUNT)

FROM (

SELECT COUNT(E2.EMPNO) AS EMP\_COUNT

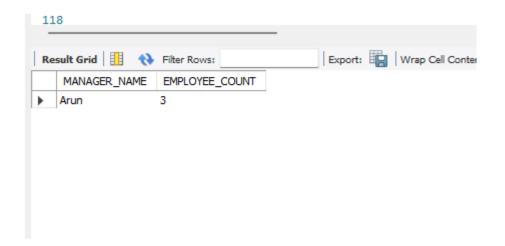
FROM EMPLOYEE E1

JOIN EMPLOYEE E2 ON E1.EMPNO = E2.MGR\_NO

GROUP BY E1.EMPNO

) AS TEMP

);



```
SELECT
```

M.ENAME AS MANAGER\_NAME, M.SAL AS MANAGER\_SALARY

**FROM** 

**EMPLOYEE M** 

WHERE

M.EMPNO IN (SELECT

E.MGR\_NO

FROM

**EMPLOYEE E** 

WHERE

E.MGR\_NO IS NOT NULL)

AND M.SAL > (SELECT

AVG(E2.SAL)

**FROM** 

**EMPLOYEE E2** 

WHERE

E2.MGR\_NO = M.EMPNO)

```
SELECT DISTINCT E.ENAME AS SECOND_LEVEL_MANAGER, D.DNAME AS DEPARTMENT FROM EMPLOYEE E

JOIN EMPLOYEE M ON E.MGR_NO = M.EMPNO

JOIN DEPT D ON E.DEPTNO = D.DEPTNO

WHERE M.MGR_NO IS NULL;
```

```
SELECT E.*
FROM EMPLOYEE E
JOIN INCENTIVES I ON E.EMPNO = I.EMPNO
WHERE MONTH(I.INCENTIVE_DATE) = 1
 AND YEAR(I.INCENTIVE_DATE) = 2019
 AND I.INCENTIVE AMOUNT = (
  SELECT DISTINCT INCENTIVE AMOUNT
  FROM INCENTIVES
  WHERE MONTH(INCENTIVE_DATE) = 1
   AND YEAR(INCENTIVE DATE) = 2019
  ORDER BY INCENTIVE_AMOUNT DESC
  LIMIT 1 OFFSET 1
 );
  163
                 AND YEAR(INCENTIVE DATE) = 2019
  Export: Wrap Cell Cont
                  MGR_NO HIREDATE
     EMPNO
                                       DEPTNO
```

SELECT E.EMPNO, E.ENAME, E.DEPTNO, D.DNAME

FROM EMPLOYEE E

JOIN EMPLOYEE M ON E.MGR\_NO = M.EMPNO

JOIN DEPT D ON E.DEPTNO = D.DEPTNO

WHERE E.DEPTNO = M.DEPTNO;

