

create database company;

use company;

1. Using ER diagram create tables specifying primary key and foreign key

```
CREATE TABLE DEPT (  
    DEPTNO INT PRIMARY KEY,  
    DNAME VARCHAR(30),  
    DLOC VARCHAR(30)  
);
```

```
CREATE TABLE EMPLOYEE (  
    EMPNO INT PRIMARY KEY,  
    ENAME VARCHAR(30),  
    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(30),  
    PLOC VARCHAR(30)  
);
```

```
CREATE TABLE ASSIGNED_TO (  
    EMPNO INT,  
    PNO INT,
```

```
JOB_ROLE VARCHAR(30),  
PRIMARY KEY (EMPNO, PNO),  
FOREIGN KEY (EMPNO) REFERENCES EMPLOYEE(EMPNO),  
FOREIGN KEY (PNO) REFERENCES PROJECT(PNO)  
);
```

```
CREATE TABLE INCENTIVES (  
    EMPNO INT,  
    INCENTIVE_DATE DATE,  
    INCENTIVE_AMOUNT DECIMAL(10,2),  
    FOREIGN KEY (EMPNO) REFERENCES EMPLOYEE(EMPNO)  
);
```

2. Insert atleast 5 tuples for each table

```
INSERT INTO DEPT VALUES  
(10, 'IT', 'Bengaluru'),  
(20, 'HR', 'Hyderabad'),  
(30, 'Finance', 'Mysuru'),  
(40, 'Sales', 'Delhi'),  
(50, 'Marketing ', 'Bengaluru');
```

```
INSERT INTO EMPLOYEE VALUES  
(1001, 'Arjun', 1005, '2021-05-12', 50000, 10),  
(1002, 'Meera', 1001, '2022-02-18', 45000, 20),
```

```
(1003, 'Rahul', 1002, '2020-12-25', 60000, 10),  
(1004, 'Sneha', 1003, '2019-08-14', 70000, 30),  
(1005, 'Vikram', NULL, '2018-04-10', 90000, 50);
```

INSERT INTO PROJECT VALUES

```
(501, 'AI Project', 'Bengaluru'),  
(502, 'Payroll System', 'Hyderabad'),  
(503, 'Bank App', 'Mysuru'),  
(504, 'E-Commerce', 'Delhi'),  
(505, 'IoT Tracker', 'Bengaluru');
```

INSERT INTO ASSIGNED_TO VALUES

```
(1001, 501, 'Developer'),  
(1002, 502, 'Analyst'),  
(1003, 503, 'Tester'),  
(1004, 504, 'Manager'),  
(1005, 505, 'Lead Developer');
```

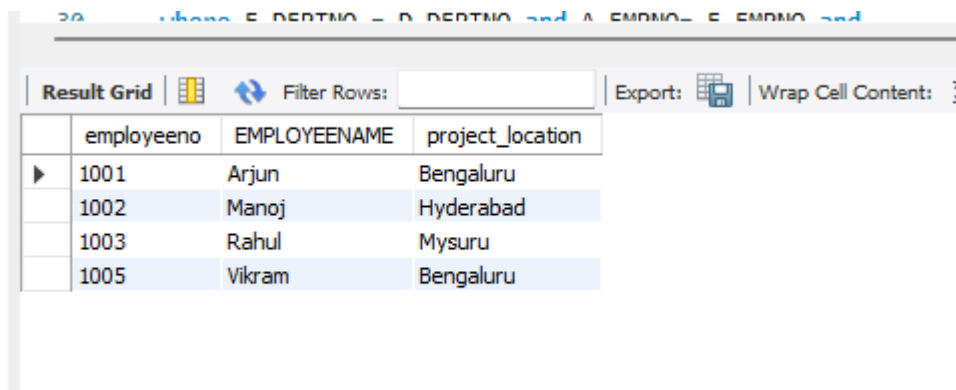
INSERT INTO INCENTIVES VALUES

```
(1001, '2023-01-15', 5000),  
(1003, '2023-02-20', 3000),  
(1005, '2023-03-12', 7000);
```

3. iii. Retrieve the employee numbers of all employees who work on project located in Bengaluru,

Hyderabad, or Mysuru

```
select E.EMPNO as employeeeno , E.ENAME as EMPLOYEEENAME ,P.PLOC as project_location
from EMPLOYEE E ,ASSIGNED_TO A , PROJECT P
where A.EMPNO=E.EMPNO and A.PNO=P.PNO
and P.PLOC in ('Bengaluru', 'Hyderabad','Mysuru');
```



The screenshot shows a database query result grid with the following data:

	employeeeno	EMPLOYEEENAME	project_location
▶	1001	Arjun	Bengaluru
	1002	Manoj	Hyderabad
	1003	Rahul	Mysuru
	1005	Vikram	Bengaluru

4. Get Employee ID's of those employees who didn't receive incentives

```
select ENAME employee , EMPNO emp_id
from EMPLOYEE
where EMPNO not in ( select EMPNO
from INCENTIVES );
```

Result Grid			Filter Rows:
	employee	emp_id	
▶	Manoj	1002	
	Sneha	1004	

5.

v. Write a SQL query to find the employees name, number, dept, job_role, department location and project location who are working for a project location same as his/her department location.

```
select E.ENAME , E.EMPNO , D.DNAME , A.JOB_ROLE , D.DLOC , P.PLOC
from EMPLOYEE E , DEPT D , ASSIGNED_TO A , PROJECT P
where E.DEPTNO = D.DEPTNO and A.EMPNO= E.EMPNO and
P.PNO = A.PNO and
D.DLOC = P.PLOC ;
```

Result Grid							Filter Rows:	Export:	Wrap Cell Content:
	ENAME	EMPNO	DNAME	JOB_ROLE	DLOC	PLOC			
▶	Arjun	1001	IT	Developer	Bengaluru	Bengaluru			
	Manoj	1002	HR	Analyst	Hyderabad	Hyderabad			
	Vikram	1005	Marketing	Lead Developer	Bengaluru	Bengaluru			