```sql
CREATE DATABASE EMP;

USE EMP;

CREATE TABLE project(
        p_no INT,
   p_name VARCHAR(20),
   p_loc VARCHAR(20),
   PRIMARY KEY(p_no)
);

CREATE TABLE dept(
        dept_no INT,
        d_name VARCHAR(20),
   d_loc VARCHAR(20),
   PRIMARY KEY(dept_no)
);

CREATE TABLE employee(
        emp_no INT,
   e_name VARCHAR(20),
   mgr_no INT,
   hire_date DATE,
   sal INT,
   dept_no INT,
   PRIMARY KEY(emp_no),
   FOREIGN KEY(dept_no) REFERENCES dept(dept_no) ON DELETE CASCADE
);

CREATE TABLE incentives(
        emp_no INT,
```

```
    incentive_date DATE,

    incentive_amount INT,

    PRIMARY KEY(emp_no,incentive_date),

    FOREIGN KEY(emp_no) REFERENCES employee(emp_no) ON DELETE CASCADE

);


CREATE TABLE assigned_to(

        emp_no INT,

    p_no INT,

    job_role VARCHAR(20),

    PRIMARY KEY(emp_no,p_no),

    FOREIGN KEY(emp_no) REFERENCES employee(emp_no) ON DELETE CASCADE,

    FOREIGN KEY(p_no) REFERENCES project(p_no) ON DELETE CASCADE

);


INSERT INTO dept VALUES

("1","Railway","Bangalore"),

("2","Airways","Hyderabad"),

("3","Roadwys","Mysore"),

("4","Waterways","Andaman"),

("5","Drainage","Bombay"),

("6","Pollution","Delhi");


INSERT INTO project VALUES

("1","Lalbhagh","Bangalore"),

("2","Sarojini nagar","Delhi"),

("3","Tiruvananth","Chennai"),
```

("4","India gate","Bombay"),

("5","Presidency","Mangalore"),

("6","Church","Goa"),

("7","Pink","Jaipur"),

("8","Taj","Agra");


INSERT INTO employee VALUES

("10","HS","101",'2015-12-1',"25000","2"),

("11","MM","102",'2013-1-12',"10000","3"),

("12","SUHAS","12",'2013-10-20',"100000","6"),

("13","VISHWAS","141",'2021-3-23',"2200","5"),

("14","VINAYAK","12",'2019-9-15',"39000","1"),

("15","UJWAL","12",'2011-8-3',"70000","4"),

("16","SKANDA","007",'2021-5-6',"30000","1"),

("17","KARANJI","1007",'2016-4-13',"19000","2");


INSERT INTO incentives VALUES

("13",'2021-11-5',"2000"),

("11",'2019-1-21',"3000"),

("14",'2020-10-15',"9000"),

("15",'2015-11-15',"7000"),

("15",'2021-11-5',"1000");


INSERT INTO assigned_to VALUES

("10","2","Architect"),

("17","2","Civil Engineer"),

("11","3","Developer"),

("13","1","Android"),

("13","3","Website"),

("14","3","Financial"),

("15","6","Sales dept"),

("10","4","Team Head"),

("15","5","Testing"),

("14","1","Cloud"),

("11","7","Dev ops"),

("10","8","Data Science");

select * from project;

| p_no | p_name | p_loc |
|------|--------|-------|
| 1 | Lalbhagh | Bangalore |
| 2 | Sarojini nagar | Delhi |
| 3 | Tiruvananth | Chennai |
| 4 | India gate | Bombay |
| 5 | Presidency | Mangalore |
| 6 | Church | Goa |
| 7 | Pink | Jaipur |
| 8 | Taj | Agra |
| NULL | NULL | NULL |

select * from dept;

| dept_no | d_name | d_loc |
|---------|--------|-------|
| 1 | Railway | Bangalore |
| 2 | Airways | Hyderabad |
| 3 | Roadwys | Mysore |
| 4 | Waterways | Andaman |
| 5 | Drainage | Bombay |
| 6 | Pollution | Delhi |
| NULL | NULL | NULL |

select * from employee;

| emp_no | e_name | mgr_no | hire_date | sal | dept_no |
|--------|--------|--------|-----------|-----|---------|
| 10 | HS | 101 | 2015-12-01 | 25000 | 2 |
| 11 | MM | 102 | 2013-01-12 | 10000 | 3 |
| 12 | SUHAS | 12 | 2013-10-20 | 100000 | 6 |
| 13 | VISHWAS | 141 | 2021-03-23 | 2200 | 5 |
| 14 | VINAYAK | 12 | 2019-09-15 | 39000 | 1 |
| 15 | UJWAL | 12 | 2011-08-03 | 70000 | 4 |
| 16 | SKANDA | 7 | 2021-05-06 | 30000 | 1 |
| 17 | KARANJI | 1007 | 2016-04-13 | 19000 | 2 |
| NULL | NULL | NULL | NULL | NULL | NULL |

select * from incentives;

| emp_no | incentive_date | incentive_amount |
|--------|----------------|------------------|
| 11 | 2019-01-21 | 3000 |
| 13 | 2021-11-05 | 2000 |
| 14 | 2020-10-15 | 9000 |
| 15 | 2015-11-15 | 7000 |
| 15 | 2021-11-05 | 1000 |
| NULL | NULL | NULL |

select * from assigned_to;

| emp_no | p_no | job_role |
|--------|------|----------|
| 10 | 2 | Architect |
| 10 | 4 | Team Head |
| 10 | 8 | Data Science |
| 11 | 3 | Developer |
| 11 | 7 | Dev ops |
| 13 | 1 | Android |
| 13 | 3 | Website |
| 14 | 1 | Cloud |
| 14 | 3 | Financial |

## QUERY 1

SELECT DISTINCT e.emp_no,e.e_name

FROM employee e,assigned_to a,project p

WHERE e.emp_no=a.emp_no AND a.p_no=p.p_no AND p.p_loc IN("Bangalore","Bombay","Mysore");

| emp_no | e_name |
|--------|--------|
| 13 | VISHWAS |
| 14 | VINAYAK |
| 10 | HS |

## QUERY 2

SELECT DISTINCT e.emp_no

FROM employee e,incentives i

WHERE e.emp_no NOT IN(SELECT i.emp_no FROM incentives i);

| | emp_no |
|---|---|
| ▶ | 16 |
| | 10 |
| | 17 |
| | 12 |

## QUERY 3

SELECT DISTINCT e.e_name,e.emp_no,e.dept_no,a.job_role,d.d_loc,p.p_loc

FROM employee e,dept d,assigned_to a,project p

WHERE d.dept_no=e.dept_no AND e.emp_no=a.emp_no AND a.p_no=p.p_no AND p.p_loc=d.d_loc;

| | e_name | emp_no | dept_no | job_role | d_loc | p_loc |
|---|---|---|---|---|---|---|
| ▶ | VINAYAK | 14 | 1 | Cloud | Bangalore | Bangalore |