Week-5

Employe database

1. creating tables (dept, employee, project, incentives, assigned_to)

```sql
1   create database employee_sk;
2
3   use employee_sk;
4
5   CREATE TABLE dept(
6       deptno INT PRIMARY KEY,
7       dname VARCHAR(50),
8       dloc VARCHAR(50));
9
10  CREATE TABLE employee (
11      empno INT PRIMARY KEY,
12      ename VARCHAR(50),
13      mgr_no INT,
14      hiredate DATE,
15      sal DECIMAL(10,2),
16      deptno INT,
17      FOREIGN KEY (deptno) REFERENCES dept(deptno));
18
```

```sql
19  CREATE TABLE project(
20      pno INT PRIMARY KEY,
21      ploc VARCHAR(50),
22      pname VARCHAR(50));
23
24  CREATE TABLE incentives (
25      empno INT,
26      incentive_date DATE,
27      incentive_amount DECIMAL(10,2),
28      primary key(empno,incentive_date),
29      FOREIGN KEY (empno) REFERENCES EMPLOYEE(empno));
30
31  CREATE TABLE assigned_to (
32      empno INT,
33      pno INT,
34      job_role varchar(50),
35      primary key(empno,pno),
36      FOREIGN KEY (empno) REFERENCES EMPLOYEE(empno),
37      FOREIGN KEY (pno) REFERENCES PROJECT(pno));
```

2. inserting tuples into the tables created.

```sql
39   INSERT INTO dept VALUES
40   (1, 'IT', 'bengaluru'),
41   (2, 'HR', 'mysuru'),
42   (3, 'finance', 'hyderabad'),
43   (4, 'admin', 'chennai'),
44   (5, 'marketing', 'pune');
45
46   select * from dept;
47
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content

deptno	dname	dloc
1	IT	bengaluru
2	HR	mysuru
3	finance	hyderabad
4	admin	chennai
5	marketing	pune
NULL	NULL	NULL

```sql
48   INSERT INTO employee VALUES
49   (101, 'alice', 201, '2022-01-10', 60000.00, 1),
50   (102, 'bBob', 202, '2023-03-15', 30000.00, 2),
51   (103, 'charlie',201, '2021-07-01', 80000.00, 1),
52   (104, 'diana', 203, '2022-11-20', 55000.00, 3),
53   (105, 'ethan', 201, '2020-05-05', 150000.00, 4);
54
55   select * from employee;
56
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content

empno	ename	mgr_no	hiredate	sal	deptno
101	alice	201	2022-01-10	60000.00	1
102	bBob	202	2023-03-15	30000.00	2
103	charlie	201	2021-07-01	80000.00	1
104	diana	203	2022-11-20	55000.00	3
105	ethan	201	2020-05-05	150000.00	4
NULL	NULL	NULL	NULL	NULL	NULL

```
57 •    INSERT INTO project VALUES
58      (1, 'bengaluru', 'apollo'),
59      (2, 'mysuru', 'orion'),
60      (3, 'hyderabad', 'titan'),
61      (4, 'pune', 'vega'),
62      (5, 'chennai', 'helios');
63
64 •    select * from project;
65
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content

pno	ploc	pname
1	bengaluru	apollo
2	mysuru	orion
3	hyderabad	titan
4	pune	vega
5	chennai	helios
NULL	NULL	NULL

```
66 •    INSERT INTO incentives VALUES
67      (101, '2023-01-01', 5000.00),
68      (103, '2023-06-15', 7000.00),
69      (104, '2023-03-10', 4500.00),
70      (105, '2022-12-25', 10000.00),
71      (101, '2023-08-01', 3000.00);
72
73 •    select * from incentives;
74
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content

empno	incentive_date	incentive_amount
101	2023-01-01	5000.00
101	2023-08-01	3000.00
103	2023-06-15	7000.00
104	2023-03-10	4500.00
105	2022-12-25	10000.00
NULL	NULL	NULL

```
75 •    INSERT INTO assigned_to VALUES
76      (101, 1, 'data analyst'),
77      (102, 2, 'HR assistant'),
78      (103, 3, 'finance manager'),
79      (104, 4, 'developer'),
80      (105, 5, 'administrator');
81
82 •    select * from assigned_to;
83
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content

empno	pno	job_role
101	1	data analyst
102	2	HR assistant
103	3	finance manager
104	4	developer
105	5	administrator
NULL	NULL	NULL

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

```
84 •    select a.empno
85      from assigned_to a,project p
86      where a.pno=p.pno and p.ploc in('bengaluru','mysuru','hyderabad');
87
88
89      |
```

empno
101
102
103

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

```
90 •    SELECT e.empno
91      FROM employee e
92      WHERE empno NOT IN (SELECT i.empno FROM incentives i);
93
94
```

empno
102
NULL

5. 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

```
95 •    SELECT  e.empno,e.ename,
96             d.dname, d.dloc AS dept_location,
97             a.job_role, p.ploc AS project_location
98      FROM employee e, dept d, assigned_to a, project p
99      WHERE e.deptno = d.deptno AND
100            e.empno = a.empno AND
101            a.pno = p.pno AND
102            d.dloc= p.ploc;
103
104
```

empno	ename	dname	dept_location	job_role	project_location
101	alice	IT	bengaluru	data analyst	bengaluru
102	bBob	HR	mysuru	HR assistant	mysuru
105	ethan	admin	chennai	administrator	chennai