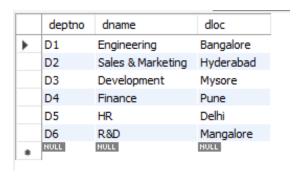# Week 5

**Vinayak Prasad**

**Section 3D**

**Batch D4**

**Queries:**

create database employee;

use employee;

create table dept

(

deptno char(5) primary key,

dname varchar(20),

dloc varchar(20)

);


create table employee

(

empno char(5) primary key,

ename varchar(20),

mgr_no char(5),

hiredate date,

sal int,

deptno char(5),

foreign key(deptno) references dept(deptno) on delete cascade

);


create table incentives

```sql
(
empno char(5),

incentive_date date primary key,

incentive_amount int,

foreign key(empno) references employee(empno) on delete cascade
);


create table project
(
pno char(5) primary key,

pname varchar(20),

ploc varchar(20)
);


create table assigned_to
(
empno char(5),

pno char(5) primary key,

job_role varchar(20),

foreign key(empno) references employee(empno) on delete cascade
);


insert into dept values('D1','Engineering','Bangalore'),('D2','Sales & Marketing','Hyderabad'),('D3','Development','Mysore'),
('D4','Finance','Pune'),('D5','HR','Delhi'),('D6','R&D','Mangalore');

select * from dept;
```

| deptno | dname | dloc |
|--------|-------|------|
| ▶ D1 | Engineering | Bangalore |
| D2 | Sales & Marketing | Hyderabad |
| D3 | Development | Mysore |
| D4 | Finance | Pune |
| D5 | HR | Delhi |
| D6 | R&D | Mangalore |
| * NULL | NULL | NULL |

insert into employee values('E1','Virat','M1','2017-05-13','5000','D1'),('E2','Abraham','M1','2018-07-03','10000','D1'),

('E3','Rahul','M2','2017-11-29','3000','D2'),('E4','Ganesh','M2','2019-05-28','6000','D3'),('E5','Prasad','M5','2018-08-21','5000','D4'),

('E6','Ram','M1','2020-04-05','8900','D1'),('E7','Abhinav','M6','2020-02-14','8900','D2'),('E8','Chandra','M3','2021-08-31','8800','D3');

select * from employee;

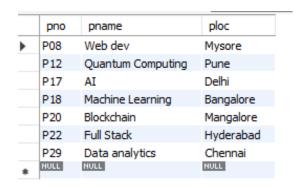| empno | ename | mgr_no | hiredate | sal | deptno |
|-------|-------|--------|----------|-----|--------|
| ▶ E1 | Virat | M1 | 2017-05-13 | 5000 | D1 |
| E2 | Abraham | M1 | 2018-07-03 | 10000 | D1 |
| E3 | Rahul | M2 | 2017-11-29 | 3000 | D2 |
| E4 | Ganesh | M2 | 2019-05-28 | 6000 | D3 |
| E5 | Prasad | M5 | 2018-08-21 | 5000 | D4 |
| E6 | Ram | M1 | 2020-04-05 | 8900 | D1 |
| E7 | Abhinav | M6 | 2020-02-14 | 8900 | D2 |
| E8 | Chandra | M3 | 2021-08-31 | 8800 | D3 |
| * NULL | NULL | NULL | NULL | NULL | NULL |

insert into project values('P18','Machine Learning','Bangalore'),('P17','AI','Delhi'),('P22','Full Stack','Hyderabad'),

('P12','Quantum Computing','Pune'),('P20','Blockchain','Mangalore'),('P08','Web dev','Mysore'),('P29','Data analytics','Chennai');

select * from project;

| pno | pname | ploc |
|---|---|---|
| P08 | Web dev | Mysore |
| P12 | Quantum Computing | Pune |
| P17 | AI | Delhi |
| P18 | Machine Learning | Bangalore |
| P20 | Blockchain | Mangalore |
| P22 | Full Stack | Hyderabad |
| P29 | Data analytics | Chennai |
| NULL | NULL | NULL |

insert into assigned_to
values('E1','P22','Controller'),('E2','P18','Technician'),('E3','P08','Cloud Engineer'),

('E4','P12','Supervisor'),('E5','P20','Developer'),('E6','P17','AI Engineer'),('E7','P29','Data Scientist');
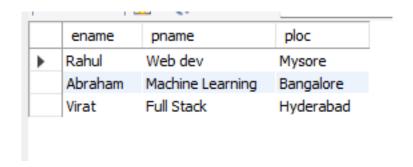
select * from assigned_to;

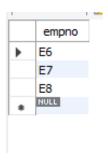| empno | pno | job_role |
|---|---|---|
| E3 | P08 | Cloud Engineer |
| E4 | P12 | Supervisor |
| E6 | P17 | AI Engineer |
| E2 | P18 | Technician |
| E5 | P20 | Developer |
| E1 | P22 | Controller |
| E7 | P29 | Data Scientist |
| NULL | NULL | NULL |

insert into incentives values('E1','2019-12-19','2800'),('E2','2020-08-01','5400'),

('E3','2018-01-10','3000'),('E4','2020-06-06','3000'),('E5','2019-10-19','1500');

select * from incentives;

| empno | incentive_date | incentive_amount |
|---|---|---|
| E3 | 2018-01-10 | 3000 |
| E5 | 2019-10-19 | 1500 |
| E1 | 2019-12-19 | 2800 |
| E4 | 2020-06-06 | 3000 |
| E2 | 2020-08-01 | 5400 |
| NULL | NULL | NULL |

select e.ename,p.pname,p.ploc from employee e, project p, assigned_to a where e.empno=a.empno and a.pno=p.pno and p.ploc in('Bangalore','Hyderabad','Mysore');

| ename | pname | ploc |
|---|---|---|
| Rahul | Web dev | Mysore |
| Abraham | Machine Learning | Bangalore |
| Virat | Full Stack | Hyderabad |

select empno from employee where empno not in(select empno from incentives);

| empno |
|---|
| E6 |
| E7 |
| E8 |
| NULL |

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.empno=a.empno and e.deptno=d.deptno and p.ploc=d.dloc;

| ename | empno | dname | job_role | dloc | ploc |
|---|---|---|---|---|---|
| Ganesh | E4 | Development | Supervisor | Mysore | Mysore |
| Prasad | E5 | Finance | Developer | Pune | Pune |
| Virat | E1 | Engineering | Controller | Bangalore | Bangalore |
| Abraham | E2 | Engineering | Technician | Bangalore | Bangalore |
| Ram | E6 | Engineering | AI Engineer | Bangalore | Bangalore |
| Rahul | E3 | Sales & Marketing | Cloud Engineer | Hyderabad | Hyderabad |
| Abhinav | E7 | Sales & Marketing | Data Scientist | Hyderabad | Hyderabad |