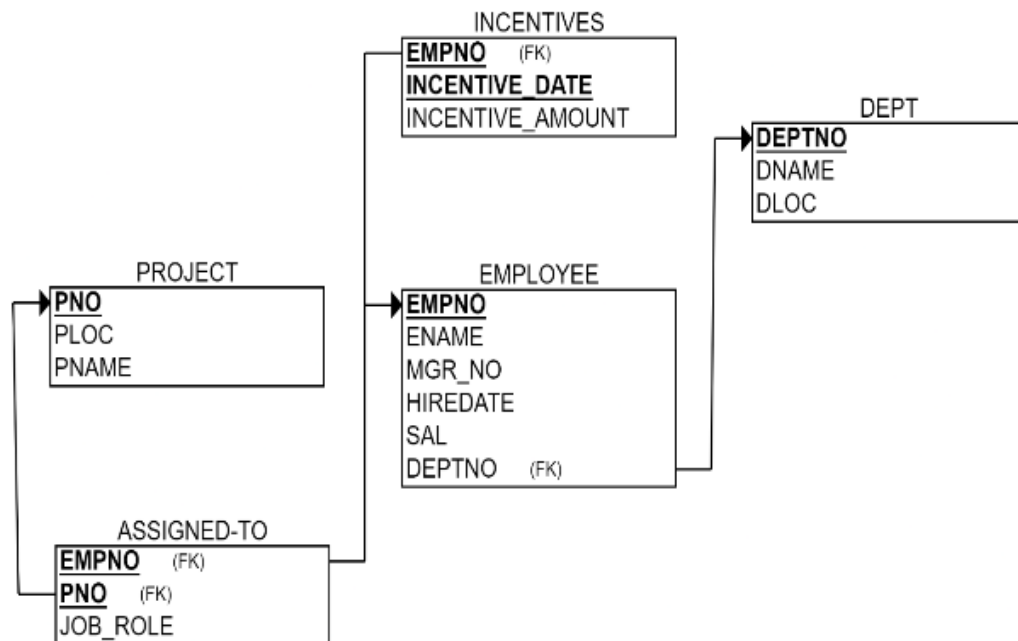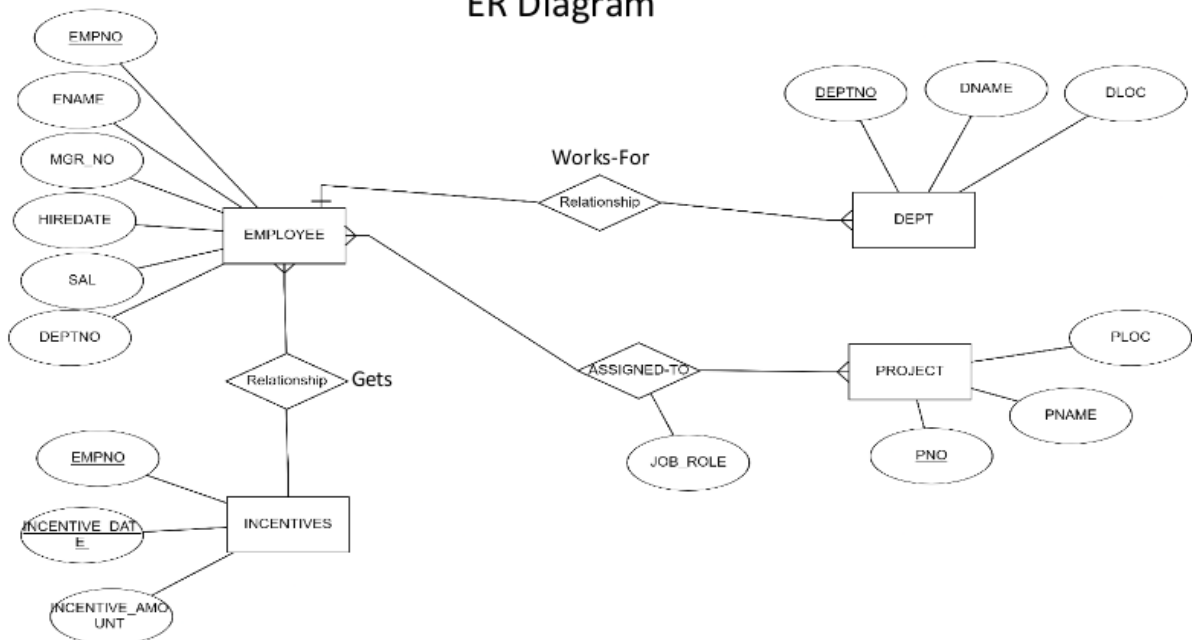# WEEK 6– MORE QUERIES ON EMPLOYEE DATABASE

Schema Diagram

ER Diagram

TO DO:

1) **Using Scheme diagram, Create tables by properly specifying the primary keys and the foreign keys.**
   (CREATION)

```
create database dhiksha_employee;
use dhiksha_employee;
create table dhiksha_employee.project(
pno int,
ploc varchar(40),
pname varchar(40),
PRIMARY KEY(pno)
);
create table dhiksha_employee.dept(
deptno int,
dname varchar(40),
dloc varchar(40),
PRIMARY KEY(deptno)
);
create table dhiksha_employee.employee(
empno int,
ename varchar(40),
mgr_no int,
hiredate date,
sal int,
deptno int,
primary key (empno),
foreign key (deptno) references dept(deptno)
);
create table dhiksha_employee.incentives(
empno int,
incentive_date date,
incentive_amount int,
primary key(incentive_date),
foreign key (empno) references employee(empno)
);
create table dhiksha_employee.assigned_to(
empno int,
```

```
    pno int,
    job_role varchar(50),
    foreign key (pno) references project(pno),
    foreign key (empno) references employee(empno)
    );
```

2) **Enter greater than five tuples for each table.**
   (INSERTION)
   ```
   insert into project values(1,"Bengaluru","Syntax");
   insert into project values(2,"Gujurat","Rolex");
   insert into project values(3,"Mysuru","Hybrid");
   insert into project values(4,"Hyderabad,","Synergy");
   insert into project values(5,"Mumbai","Mercury");
   insert into project values(6,"Kerela","Innovation");

   insert into dept values(10,"Sales","Bengaluru");
   insert into dept values(20,"Finance","West Bengal");
   insert into dept values(30,"Marketing","Bihar");
   insert into dept values(40,"Purchase","Mumbai");
   insert into dept values(50,"Research & Development" ,"Hyderabad");
   insert into dept values(60,"Technical","Kerela");

   insert into employee values(100,"Prannay",700,'2003-01-01',24000,10);
   insert into employee values(200,"Farhaan",100,'2004-02-02',17000,50);
   insert into employee values(300,"Sanika",100,'2003-01-21',9000,30);
   insert into employee values(400,"Sakshi", 300 ,'2008-02-17',12000,40);
   insert into employee values(500,"Nishith",400,'2004-03-05',3000,40);
   insert into employee values(600,"Sohan",100,'2005-11-01',2000,20);
   insert into employee values(700,"Mahima",NULL,'2005-11-21',8000,20);

   insert into incentives values(100,'2019-02-17',6000);
   insert into incentives values(200,'2019-05-21',7000);
   insert into incentives values(400,'2012-07-25',6500);
   insert into incentives values(500,'2019-04-19',7400);
   insert into incentives values(600,'2013-08-08',8000);
   insert into incentives values(700,'2019-08-08',8000);
   ```

insert into assigned_to values(100,1, "Project Manager");
insert into assigned_to values(200,1, "Resource Manager");
insert into assigned_to values(300,2, "Business Analyst");
insert into assigned_to values(400,3, "Business Analyst");
insert into assigned_to values(500,3, "Project Manager");
insert into assigned_to values(600,5, "Resource Manager");

- **SELECTION**

select * from project;

pno	ploc	pname
1	Bengaluru	Syntax
2	Gujurat	Rolex
3	Mysuru	Hybrid
4	Hyderabad,	Synergy
5	Mumbai	Mercury
6	Kerela	Innovation
NULL	NULL	NULL

project 42 ✕

select * from dept;

deptno	dname	dloc
10	Sales	Bengaluru
20	Finance	West Bengal
30	Marketing	Bihar
40	Purchase	Mumbai
50	Research & Develeopment	Hyderabad
60	Technical	Kerela
NULL	NULL	NULL

dept 43 ✕

select * from employee;

empno	ename	mgr_no	hiredate	sal	deptno
100	Prannay	700	2003-01-01	24000	10
200	Farhaan	100	2004-02-02	17000	50
300	Sanika	100	2003-01-21	9000	30
400	Sakshi	300	2008-02-17	12000	40
500	Nishith	400	2004-03-05	3000	40
600	Sohan	100	2005-11-01	2000	20
700	Mahima	NULL	2005-11-21	8000	20
NULL	NULL	NULL	NULL	NULL	NULL

employee 44 ✕

select * from incentives;

empno	incentive_date	incentive_amount
400	2012-07-25	6500
600	2013-08-08	8000
100	2019-02-17	6000
500	2019-04-19	7400
200	2019-05-21	7000
700	2019-08-08	8000
NULL	NULL	NULL

incentives 45 ×

select * from assigned_to;

empno	pno	job_role
100	1	Project Manager
200	1	Resource Manager
300	2	Business Analyst
400	3	Business Analyst
500	3	Project Manager
600	5	Resource Manager

assigned_to 46 ×

3) List the name of the managers with the maximum employees

select e1.ename

from employee e1, employee e2

where e1.empno=e2.mgr_no group by e1.ename

having count(e1.mgr_no)=(select count(e1.ename)

from employee e1, employee e2 where e1.empno=e2.mgr_no

group by e1.ename order by count(e1.ename) desc limit 1);

ename
Prannay

Result 47 ×

4) Display those managers name whose salary is more than average salary of his

select m.ename from employee m

where m.empno in

   (select mgr_no from employee)

   and m.sal>(select avg(n.sal) from employee n

   where n.mgr_no=m.empno);

Result Grid	Filter Rows:	Export:	Wrap Cell Content:
ename			
▶ Prannay			
Sakshi			

employee 48 ×

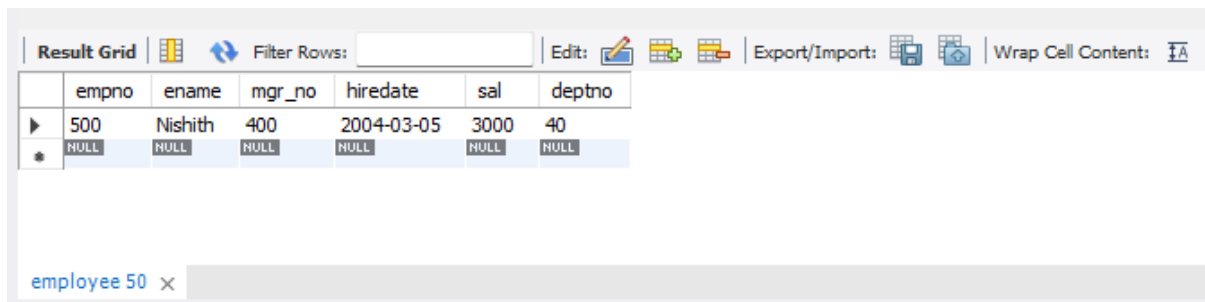**5) Find the name of the second top level managers of each department.**

select ename from employee where empno in(select distinct mgr_no

from employee where empno in

      (select distinct mgr_no from employee where empno in

         (select distinct mgr_no from employee)));

Result Grid	Filter Rows:	Export:	Wrap Cell Content:
ename			
▶ Prannay			

Result 53 ×

6) **Find the employee details who got second maximum incentive in January 2019.**

select * from employee where empno=
(select i.empno from incentives i
where i.incentive_amount= (select max(n.incentive_amount) from incentives n
where n.incentive_amount<(select max(inc.incentive_amount) from incentives inc
where inc.incentive_date between '2019-01-01' and '2019-12-31') and incentive_date between '2019-01-01' and '2019-12-31'));
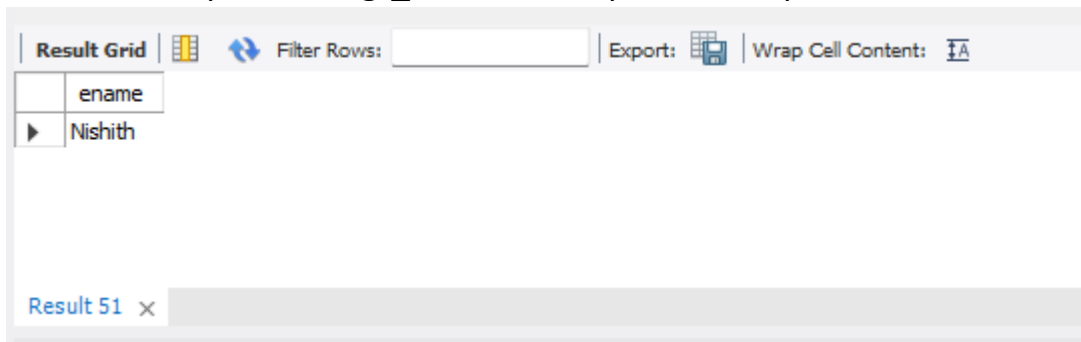
	empno	ename	mgr_no	hiredate	sal	deptno
▶	500	Nishith	400	2004-03-05	3000	40
*	NULL	NULL	NULL	NULL	NULL	NULL

employee 50 ×

7) **Display those employees who are working in the same department where his manager is working.**

select e2.ename
from employee e1, employee e2
where e1.empno=e2.mgr_no and e1.deptno=e2.deptno;

	ename
▶	Nishith

Result 51 ×