

**WEEK-6**  
**(1BM21CS045)**  
**EMPLOYEE DATABASE**

**TO DO**

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

```
create database 1bm21cs045_employee2;  
use 1bm21cs045_employee2;
```

```
create table dept(  
deptno int,  
dname varchar(20),  
dloc varchar(20),  
primary key(deptno)  
);  
create table employee(  
empno int,  
ename varchar(20),  
mgr_no int,  
hiredate date,  
sal double,  
deptno int,  
primary key(empno),  
foreign key (deptno) references dept(deptno)  
on delete cascade  
on update cascade  
);  
create table incentives(  
empno int,  
incentive_date date,  
incentive_amount float,  
primary key(empno,incentive_date),  
foreign key (empno) references employee(empno)  
on delete cascade  
on update cascade  
);  
create table project(  
pno int,  
ploc varchar(20),  
pname varchar(20),  
primary key(pno)
```

```
);
create table assigned_to(
empno int,
pno int,
job_role varchar(20),
primary key(empno,pno),
foreign key (empno) references employee(empno),
foreign key (pno) references project(pno)
on delete cascade
on update cascade
);
```

## 2. Enter greater than five tuples for each table.

```
insert into dept values(10,'cse','bangalore');
insert into dept values(20,'ise','bangalore');
insert into dept values(30,'aiml','hyderabad');
insert into dept values(40,'ece','mysore');
insert into dept values(50,'eee','delhi');
insert into dept values(60,'iem','chennai');
```

```
insert into employee values(11,'Rajesh',21,'2000-04-03',80000,10);
insert into employee values(12,'Ajay',11,'2003-04-06',70000,20);
insert into employee values(13,'Divya',11,'2006-03-07',60000,30);
insert into employee values(14,'Chandan',12,'2007-09-03',50000,40);
insert into employee values(15,'Bhavesh',13,'2009-11-13',40000,50);
insert into employee values(16,'Tarun',14,'2012-02-10',30000,60);
insert into employee values(17,'Brinda',11,'2009-05-12',50000,10);
insert into employee values(18,'Anil',15,'2015-01-01',30000,20);
insert into employee values(19,'Puja',15,'2020-10-21',60000,30);
insert into employee values(20,'Ram',16,'2021-09-17',45000,40);
insert into employee values(21,'Priya',22,'2002-03-13',85000,10);
```

```
insert into incentives values(11,'2012-09-08',40000);
insert into incentives values(12,'2015-07-10',33000);
insert into incentives values(13,'2019-01-21',7000);
insert into incentives values(14,'2019-01-05',8000);
insert into incentives values(15,'2019-01-13',5000);
insert into incentives values(17,'2021-03-17',6000);
insert into incentives values(18,'2021-04-16',8000);
insert into incentives values(19,'2021-08-11',9000);
```

```
insert into project values(121,'bangalore','proj1');
insert into project values(122,'bangalore','proj2');
```

```

insert into project values(123,'mysore','proj3');
insert into project values(124,'hyderabad','proj4');
insert into project values(125,'delhi','proj5');
insert into project values(126,'mumbai','proj6');
insert into project values(127,'calicut','proj7');
insert into project values(128,'calicut','proj8');

```

```

insert into assigned_to values(11,121,'manager');
insert into assigned_to values(12,122,'team_lead');
insert into assigned_to values(13,123,'analyst');
insert into assigned_to values(14,124,'team_lead');
insert into assigned_to values(15,125,'manager');
insert into assigned_to values(16,126,'programmer');
insert into assigned_to values(17,127,'team_lead');
insert into assigned_to values(19,128,'team_lead');

```

```
select * from employee
```

Result Grid						
Filter Rows:						
	empno	ename	mgr_no	hiredate	sal	deptno
▶	11	Rajesh	21	2000-04-03	80000	10
	12	Ajay	11	2003-04-06	70000	20
	13	Divya	11	2006-03-07	60000	30
	14	Chandan	12	2007-09-03	50000	40
	15	Bhaves	13	2009-11-13	40000	50
	16	Tarun	14	2012-02-10	30000	60
	17	Brinda	11	2009-05-12	50000	10
	18	Anil	15	2015-01-01	30000	20
	19	Puja	15	2020-10-21	60000	30
	20	Ram	16	2021-09-17	45000	40
	21	Priya	22	2002-03-13	85000	10
	23	Manas	11	2019-03-13	3000	10
	24	Prem	11	2020-03-13	8000	10
*	NULL	NULL	NULL	NULL	NULL	NULL

employee 37 ×

### 3. List the name of the managers with the maximum employees

```

select emp.ename
from employee emp
where emp.empno=(

```

```

select mgr_no
from employee e
group by mgr_no
having count(empno) >= all(
select (count(empno))
from employee
group by mgr_no ));

```

The screenshot shows a 'Result Grid' window with a 'Filter Rows' button. The grid contains one row with the name 'Rajesh' under the 'ename' column. The window title is 'employee 38'.

ename
Rajesh

**4. Display those managers name whose salary is more than average salary of his employee.**

```

select emp.ename
from employee emp
where emp.sal > any (
select avg(e.sal)
from employee e
where emp.empno=e.mgr_no
);

```

The screenshot shows a 'Result Grid' window with a 'Filter Rows' button. The grid contains five rows with the names 'Rajesh', 'Ajay', 'Divya', 'Chandan', and 'Priya' under the 'ename' column. The window title is 'employee 39'.

ename
Rajesh
Ajay
Divya
Chandan
Priya

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

```

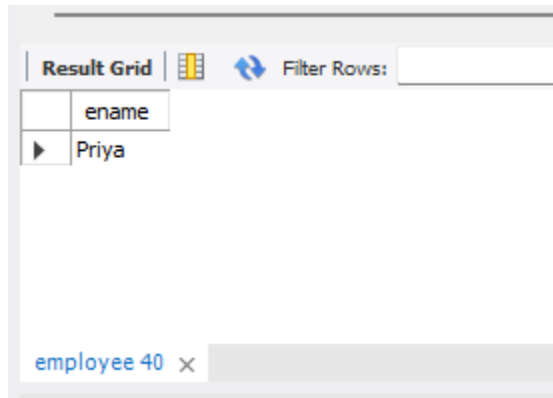
select emp.ename
from employee emp

```

```

where emp.ename = any(
select e2.ename
from employee e, employee e2
where e2.empno=e.mgr_no and e2.deptno = e.deptno and e.ename = any(
select e1.ename
from employee e1, employee e0
where e1.empno=e0.mgr_no and e1.deptno = e0.deptno
group by e1.mgr_no
having count(e1.empno)>1)
);

```



ename
Priya

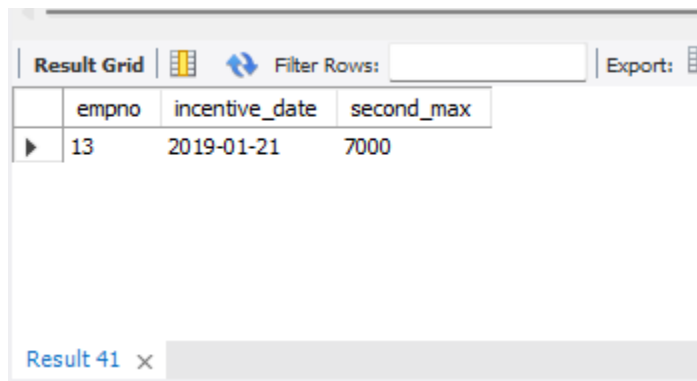
employee 40 x

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

```

select i.empno, i.incentive_date, max(i.incentive_amount)second_max
from incentives i
where i.incentive_date between '2019-01-01' and '2019-01-31' and i.incentive_amount not in(
select max(incentive_amount)
from incentives
where incentive_date between '2019-01-01' and '2019-01-31');

```



empno	incentive_date	second_max
13	2019-01-21	7000

Result 41 x

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

```

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

```

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

	ename	deptno
▶	Rajesh	10
	Brinda	10
	Manas	10
	Prem	10

Below the table, there is a tab labeled "Result 42" and an "Output" section.

**Spot query-Find the employee details who got third maximum incentive in January 2019.**

```

select i.empno, i.incentive_amount
from incentives i
where 3 = (
    select count(*)
    from incentives j
    where incentive_date between '2019-01-01' and '2019-01-31' and i.incentive_amount <=
        j.incentive_amount)
and incentive_date between '2019-01-01' and '2019-01-31';

```

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

	empno	incentive_amount
▶	15	5000

Below the table, there is a tab labeled "incentives 1" and an "Output" section.