WEEK 6– QUERIES

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

TABLE DEPARTMENT

```
create table dept(
d_no int,
d_name varchar (10),
d_loc varchar (30),
primary key(d_no)
);
```

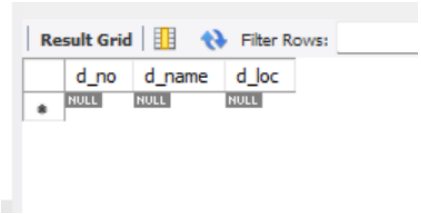


TABLE PROJECT

```
create table project(
p_no int,
p_loc varchar(20),
p_name varchar(15),
PRIMARY KEY(p_no)
);
```

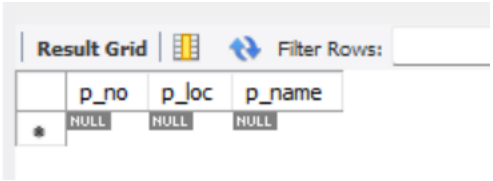


TABLE EMPLOYEE

```
create table employee(
emp_no int,
emp_name varchar(10),
mgr_no int,
hiredate date,
sal real,
d_no int,
primary key(emp_no),
foreign key(d_no) references dept(d_no)
```

on update cascade on delete cascade

);

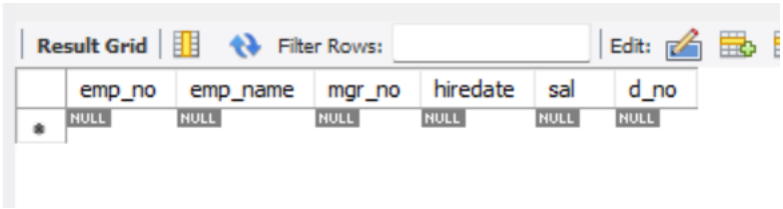


TABLE INCENTIVES

create table incentives(

emp_no int,

incentive_date date,

incentive_amt real,

primary key(incentive_date),

foreign key(emp_no) references employee(emp_no)

on update cascade on delete cascade

);

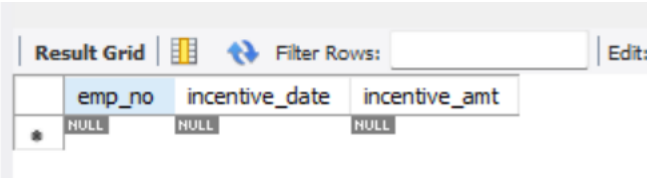


TABLE ASSIGNED

create table assigned(

emp_no int,

p_no int,

job_role varchar(10),

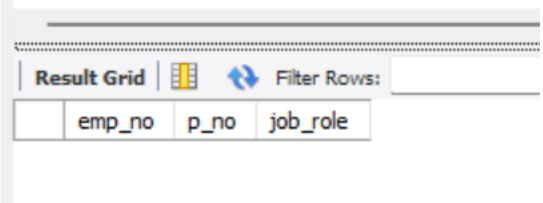
foreign key(emp_no) references employee(emp_no)

on update cascade on delete cascade,

foreign key(p_no) references project(p_no)

on update cascade on delete cascade

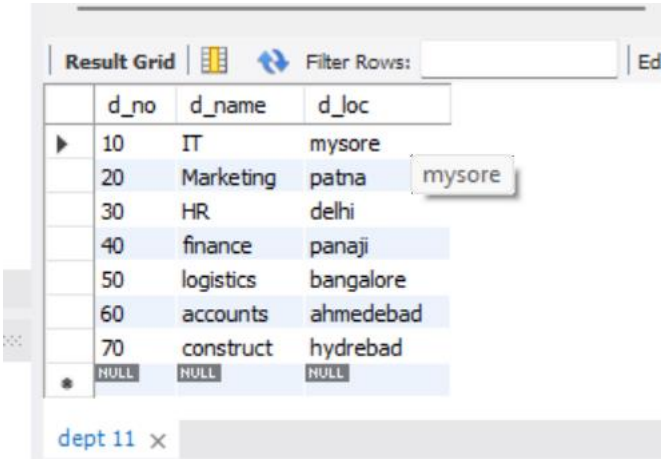
);



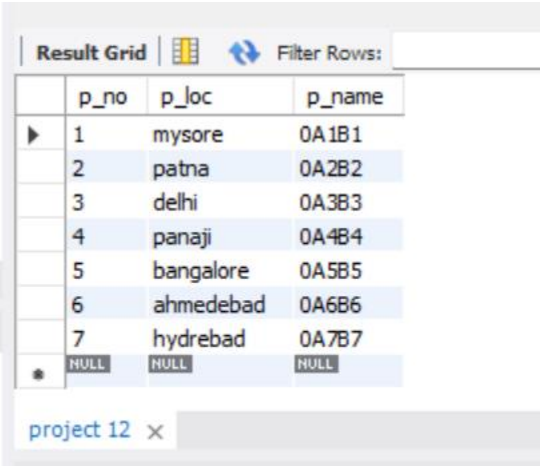
2. Enter greater than five tuples for each table.

SQL>

```
insert into  dept values(10,'IT','mysore');

insert into  dept values(20,'Marketing','patna');

insert into  dept values(30,'HR','delhi');

insert into  dept values(40,'finance','panaji');

insert into  dept values(50,'logistics','bangalore');

insert into  dept values(60,'accounts','ahmedebad');

insert into  dept values(70,'construct','hydrebad');
```




```
insert into  project values(1,'mysore','0A1B1');

insert into  project values(2,'patna','0A2B2');

insert into  project values(3,'delhi','0A3B3');

insert into  project values(4,'panaji','0A4B4');

insert into project values(5,'bangalore','0A5B5');

insert into project values(6,'ahmedebad','0A6B6');

insert into project values(7,'hydrebad','0A7B7');
```




```
insert into employee values(101,'sony',null,'2010-01-01',140000,10);

insert into employee values(102,'toni',104,'2009-07-31',28000,20);
```

insert into employee values(103,'rishi',104,'2015-02-24',30000,30);

insert into employee values(104,'santhosh',101,'2018-09-08',94000,10);

insert into employee values(105,'vineeth',108,'2009-05-18',11000,40);

insert into employee values(106,'twinkle',104,'2002-12-25',30000,50);

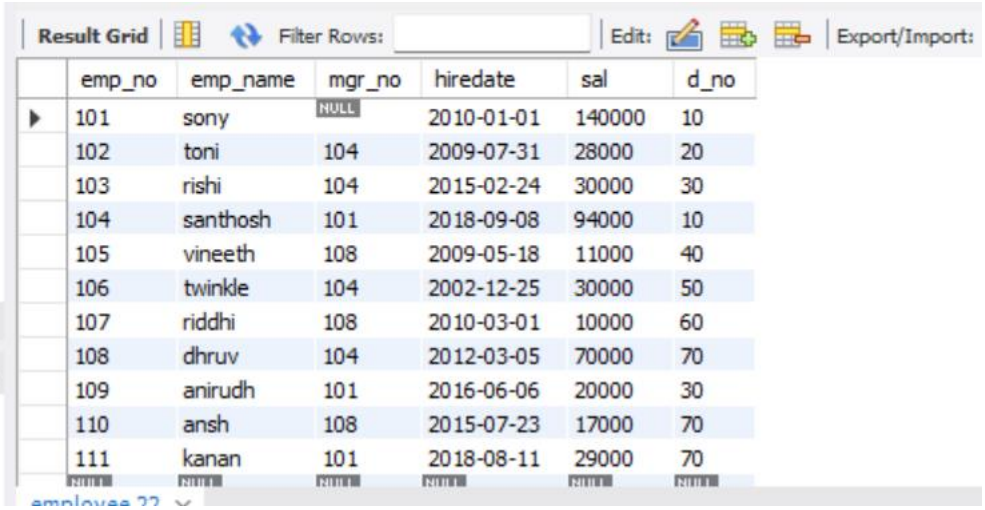
insert into employee values(107,'riddhi',108,'2010-03-01',10000,60);

insert into employee values(108,'dhruv',104,'2012-03-05',70000,70);

insert into employee values(109,'anirudh',101,'2016-06-06',20000,30);

insert into employee values(110,'ansh',108,'2015-07-23',17000,70);

insert into employee values(111,'kanan',101,'2018-08-11',29000,70);



Result Grid | Filter Rows: | Edit: | Export/Import:

emp_no	emp_name	mgr_no	hiredate	sal	d_no
101	sony	NULL	2010-01-01	140000	10
102	toni	104	2009-07-31	28000	20
103	rishi	104	2015-02-24	30000	30
104	santhosh	101	2018-09-08	94000	10
105	vineeth	108	2009-05-18	11000	40
106	twinkle	104	2002-12-25	30000	50
107	riddhi	108	2010-03-01	10000	60
108	dhruv	104	2012-03-05	70000	70
109	anirudh	101	2016-06-06	20000	30
110	ansh	108	2015-07-23	17000	70
111	kanan	101	2018-08-11	29000	70

insert into incentives values(103,'2022-07-12',2500);

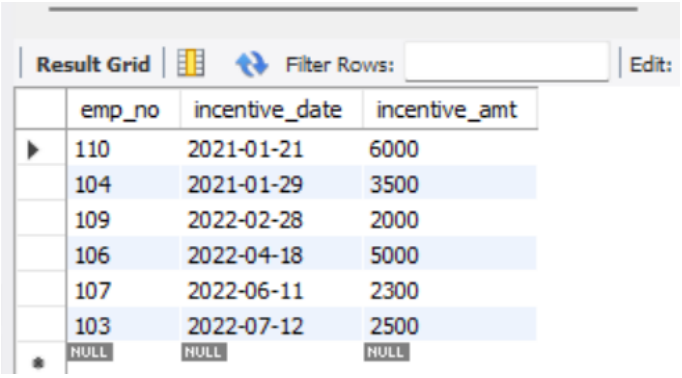
insert into incentives values(104,'2021-01-29',3500);

insert into incentives values(109,'2022-02-28',2000);

insert into incentives values(110,'2021-01-21',6000);

insert into incentives values(106,'2022-04-18',5000);

insert into incentives values(107,'2022-06-11',2300);



Result Grid | Filter Rows: | Edit:

emp_no	incentive_date	incentive_amt
110	2021-01-21	6000
104	2021-01-29	3500
109	2022-02-28	2000
106	2022-04-18	5000
107	2022-06-11	2300
103	2022-07-12	2500
NULL	NULL	NULL

insert into assigned values(101,1,'manager');

insert into assigned values(102,2,'assistant');

insert into assigned values(103,3,'supervisor');

insert into assigned values(104,1,'accountant');

insert into assigned values(105,4,'clerk');

insert into assigned values(106,7,'peon');

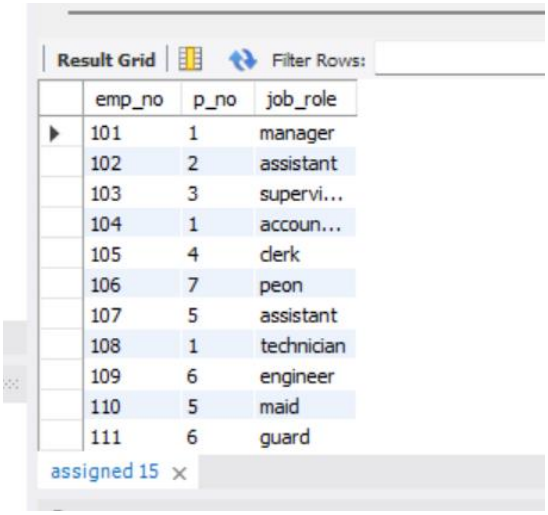
insert into assigned values(107,5,'assistant');

insert into assigned values(108,1,'technician');

insert into assigned values(109,6,'engineer');

insert into assigned values(110,5,'maid');

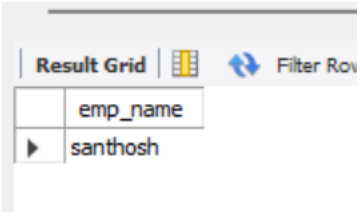
insert into assigned values(111,6,'guard');



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

SQL>

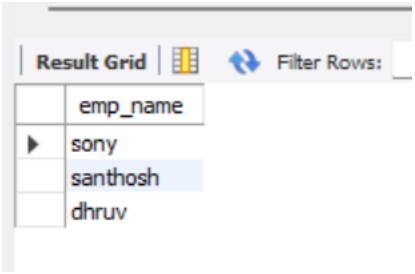
```
select emp_name from employee where emp_no =(select mgr_no from employee group by mgr_no having count(emp_no)=(
 select count(emp_no) from employee group by mgr_no order by count(emp_no) desc limit 1));
```



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

SQL>

```
select * from employee where emp_no =( select emp_no from incentives where incentive_date between '20121-01-01' and '2021-01-31'

 and incentive_amt!=(select max(incentive_amt) from incentives where incentive_date between '2021-01-01' and '2021-01-31'));
```



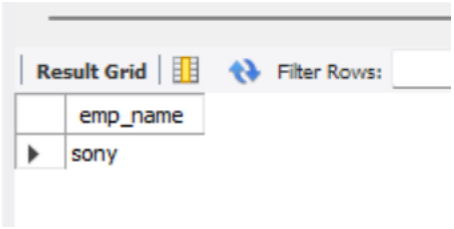
Result Grid | Filter Rows:

emp_name
sony
santhosh
dhruv

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

SQL>

```
select emp_name from employee where emp_no in(select distinct mgr_no
from employee where emp_no in (select distinct mgr_no
from employee where emp_no in(select distinct mgr_no from employee)));
```



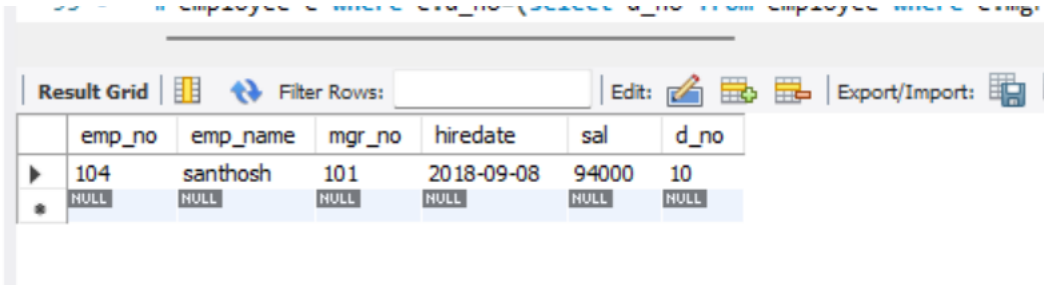
Result Grid | Filter Rows:

emp_name
sony

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

SQL> select * from employee where emp_no =(select emp_no from incentives where incentive_date between '20121-01-01' and '2021-01-31'

and incentive_amt!=(select max(incentive_amt) from incentives where incentive_date between '2021-01-01' and '2021-01-31'));



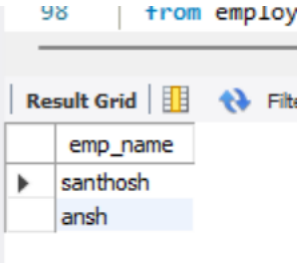
Result Grid | Filter Rows: | Edit: | Export/Import:

emp_no	emp_name	mgr_no	hiredate	sal	d_no
104	santhosh	101	2018-09-08	94000	10
NULL	NULL	NULL	NULL	NULL	NULL

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

SQL>

```
select e.emp_name from employee e where e.d_no=(select d_no from employee where
e.mgr_no=emp_no);
```



98 | from employ

Result Grid | Filt

emp_name
santhosh
ansh