Week 5

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

```
create database employee_2;
use employee_2;

create table project(
p_no int,
p_loc varchar(15),
p_name varchar(15),
primary key(p_no)
);

create table dept(
dept_no int,
d_name varchar(15),
d_loc varchar(15),
primary key(dept_no)
);

create table employee(
emp_no int,
e_name varchar(15),
mgr_no int,
hire_date date,
```

```
sal int,
dept_no int,
primary key(emp_no,dept_no),
foreign key(dept_no) references dept(dept_no)
);

create table incentives(
emp_no int,
incentive_date date,
incentive_amount int,
primary key(emp_no),
foreign key(emp_no) references employee(emp_no)
);

create table assigned_to(
emp_no int,
p_no int,
job_role varchar(15),
primary key(emp_no,p_no),
foreign key(emp_no) references employee(emp_no),
foreign key(p_no) references project(p_no)
);
```

2. Enter greater than five tuples for each table.

```
insert into project values
(11,'indore','project_a'),
```

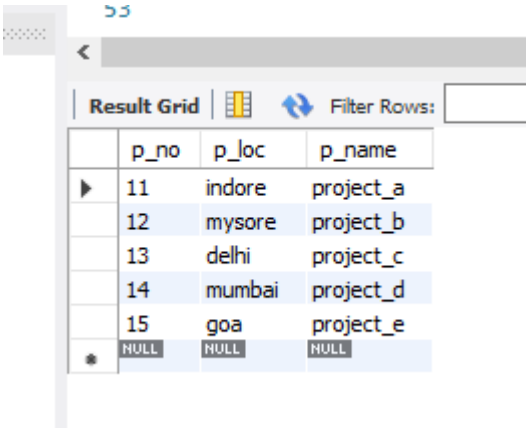
(12,'mysore','project_b'),

(13,'delhi','project_c'),

(14,'mumbai','project_d'),

(15,'goa','project_e');

Select * from project;



Result Grid | Filter Rows:

p_no	p_loc	p_name
11	indore	project_a
12	mysore	project_b
13	delhi	project_c
14	mumbai	project_d
15	goa	project_e
NULL	NULL	NULL

insert into dept values

(01,'research','indore'),

(02,'admin','mysore'),

(03,'marketing','delhi'),

(04,'publicity','mumbai'),

(05,'headquarters','goa');

Select * from dept;

```
62 •  insert into employee values
```

Result Grid | Filter Rows: | Edit:

dept_no	d_name	d_loc
1	research	indore
2	admin	mysore
3	marketing	delhi
4	publicity	mumbai
5	headquarters	goa
NULL	NULL	NULL

insert into employee values

(1,'jack',3457,'1990-07-05',1400,01),

(2,'snehal',5723,'1991-05-05',5000,02),

(3,'shivani',9620,'1992-11-09',6000,03),

(4,'shikha',6734,'1993-04-12',7000,04),

(5,'jay',5687,'1994-10-28',8000,05),

(6,'shreya',5987,'1994-09-02',8000,05);

select * from employee;

```
70
71 •  insert into incentives values
```

Result Grid | Filter Rows: | Edit: | Export

emp_no	e_name	mgr_no	hire_date	sal	dept_no
1	jack	3457	1990-07-05	1400	1
2	snehal	5723	1991-05-05	5000	2
3	shivani	9620	1992-11-09	6000	3
4	shikha	6734	1993-04-12	7000	4
5	jay	5687	1994-10-28	8000	5
6	shreya	5987	1994-09-02	8000	5
NULL	NULL	NULL	NULL	NULL	NULL

insert into incentives values

(1,'1986-04-05',1200),

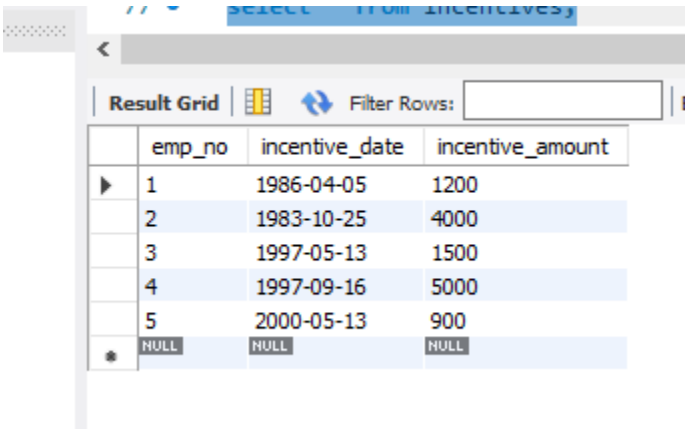
(2,'1983-10-25',4000),

(3,'1997-05-13',1500),

(4,'1997-09-16',5000),

(5,'2000-05-13',900);

select * from incentives;



emp_no	incentive_date	incentive_amount
1	1986-04-05	1200
2	1983-10-25	4000
3	1997-05-13	1500
4	1997-09-16	5000
5	2000-05-13	900
NULL	NULL	NULL

insert into assigned_to values

(1,11,'assistant'),

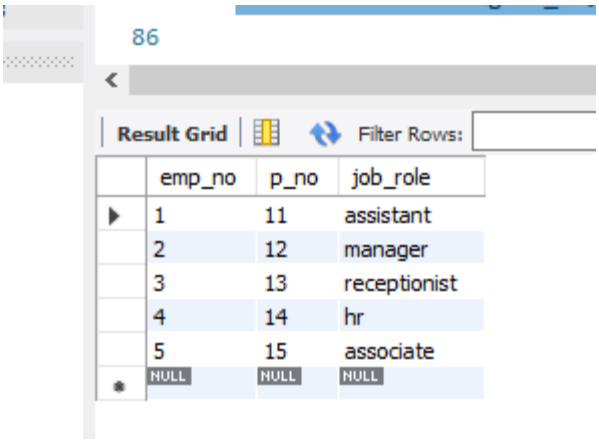
(2,12,'manager'),

(3,13,'receptionist'),

(4,14,'hr'),

(5,15,'associate');

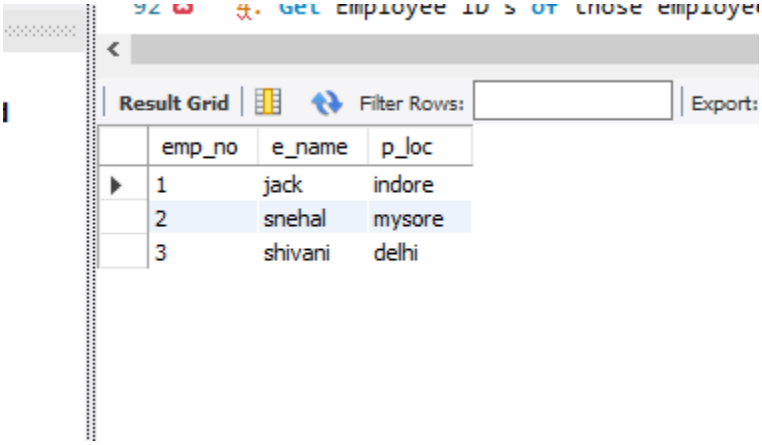
select * from assigned_to;



3. Retrieve the employee numbers of all employees who work on

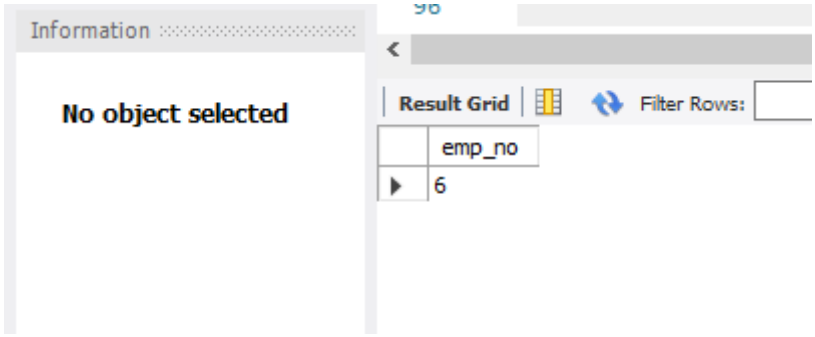
project located in indore,mysore , delhi.

```
select a.emp_no, e.e_name, p.p_loc
from employee e , assigned_to a, project p
where a.p_no = p.p_no and e.emp_no=a.emp_no and p.p_loc in('indore','delhi','mysore');
```



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

```
select e.emp_no
from employee e
where e.emp_no not in (select i.emp_no from incentives i);
```

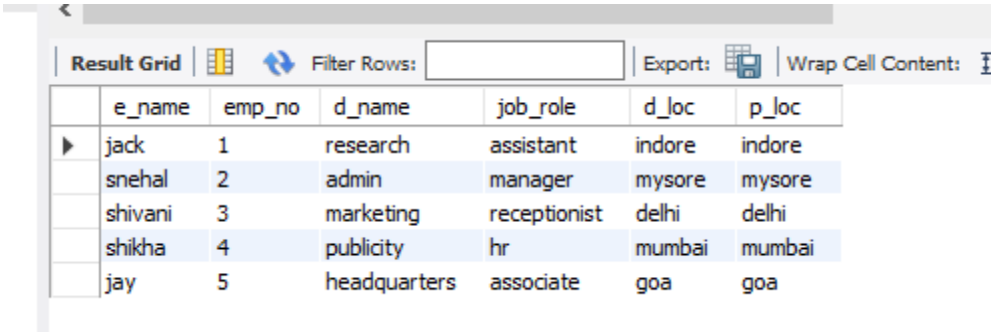


5. Write a SQL query to find the employees name, number, dept,

job_role, department location and project location who are working for

a project location same as his/her department location.

```
select e.e_name, e.emp_no, d.d_name,a.job_role,d.d_loc, p.p_loc
from project p, dept d, employee e, assigned_to a
where e.emp_no = a.emp_no and p.p_no = a.p_no and e.dept_no=d.dept_no and p.p_loc = d.d_loc;
```



Result Grid | Filter Rows: | Export: | Wrap Cell Content:

e_name	emp_no	d_name	job_role	d_loc	p_loc
jack	1	research	assistant	indore	indore
snehal	2	admin	manager	mysore	mysore
shivani	3	marketing	receptionist	delhi	delhi
shikha	4	publicity	hr	mumbai	mumbai
jay	5	headquarters	associate	goa	goa

On Spot Query

find name of employee , dept_name , job role of employee who recieve highest incentive in the year 1997.

```
select distinct e.e_name,d.d_name,a.job_role from employee e, dept d, assigned_to a,incentives i where
e.emp_no = a.emp_no and e.emp_no = i.emp_no and e.dept_no = d.dept_no and i.incentive_amount=
```

(select max(i.incentive_amount) from incentives i where incentive_date between'1997-1-1' and '1997-12-31');