

Week 5

Employee database

1BM21CS044

```
create database employee;
use employee;

create table dept(
dept_no int,
d_name varchar(10),
d_loc varchar(20),
primary key(dept_no)
);
create table emp(
emp_no int,
e_name varchar(10),
mgr_no int,
hiredate date,
sal real,
dept_no int,
primary key(emp_no),
foreign key (dept_no) references dept(dept_no)
);
create table incentives(
emp_no int,
incentive_date date,
incentive_amount real,
primary key(incentive_date),
foreign key (emp_no) references emp(emp_no)
);
create table project(
p_no int,
p_name varchar(20),
p_loc varchar(20),
primary key(p_no)
);
create table assigned_to(
emp_no int,
p_no int,
job_role varchar(20),
foreign key (emp_no) references emp(emp_no),
foreign key (p_no) references project(p_no)
);
insert into dept values(1,'CSE','Siddapur');
insert into dept values(2,'ISE','Sirsi');
insert into dept values(3,'ECE','Pune');
insert into dept values(4,'EEE','Hubli');
insert into dept values(5,'IM','Mumbai');
insert into dept values(6,'BT','Goa');
select *from dept;
```

```
insert into emp values(1,'Akash',7,'2020-01-12',20000,4);
insert into emp values(2,'Bhuvan',8,'2020-03-14',40000,1);
insert into emp values(3,'Chris',9,'2021-02-25',35000,2);
insert into emp values(4,'Kiran',10,'2021-11-30',60000,6);
insert into emp values(5,'Pavan',11,'2022-3-10',52000,3);
insert into emp values(6,'Santosh',12,'2022-5-24',48000,5);
select *from emp;
```

```
insert into project values(1,'pro1','Bengaluru');
insert into project values(2,'pro2','Pune');
insert into project values(3,'pro3','Hyderabad');
insert into project values(4,'pro4','Kerala');
insert into project values(5,'pro5','Mysuru');
insert into project values(6,'pro6','Sirsi');
select *from project;
```

```
insert into incentives values(1,'2021-01-12',00000);
insert into incentives values(2,'2021-12-12',8000);
insert into incentives values(3,'2022-06-09',6500);
insert into incentives values(4,'2022-11-29',0000);
insert into incentives values(5,'2023-05-30',9800);
insert into incentives values(6,'2023-08-17',7000);
select *from incentives;
```

```
insert into assigned_to values(1,1,'Developer');
insert into assigned_to values(2,2,'Assistant');
insert into assigned_to values(3,3,'Co-assistant');
insert into assigned_to values(4,4,'Organiser');
insert into assigned_to values(5,5,'Manager');
insert into assigned_to values(6,6,'Supervisor');
select *from assigned_to;
```

```
select emp_no from assigned_to a
where p_no in (select p_no from project where p_loc in ('Bengaluru','Hyderabad','Mysuru'));
```

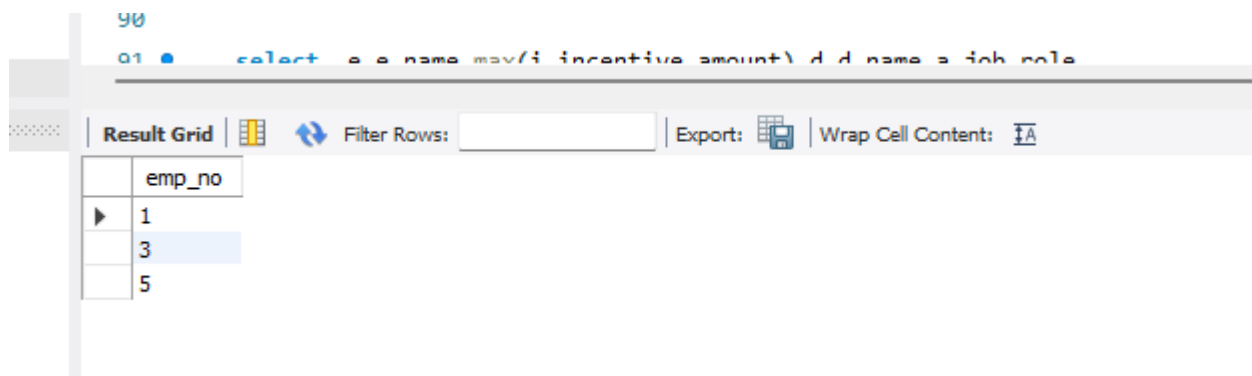
```
select emp_no,e_name from emp
where emp_no in (select emp_no from incentives
where incentive_amount=0);
```

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

```
select e.e_name,max(i.incentive_amount),d.d_name,a.job_role
from emp e,dept d,assigned_to a,incentives i
where e.emp_no in(select emp_no
from incentives
where incentive_amount=
(select max(incentive_amount)
from incentives
where incentive_date between '2022-01-01' and '2022-12-31'))
and d.dept_no=e.dept_no and a.emp_no=e.emp_no;
```

QUERY 1

```
select emp_no from assigned_to a
where p_no in (select p_no from project where p_loc in
('Bengaluru','Hyderabad','Mysuru'));
```

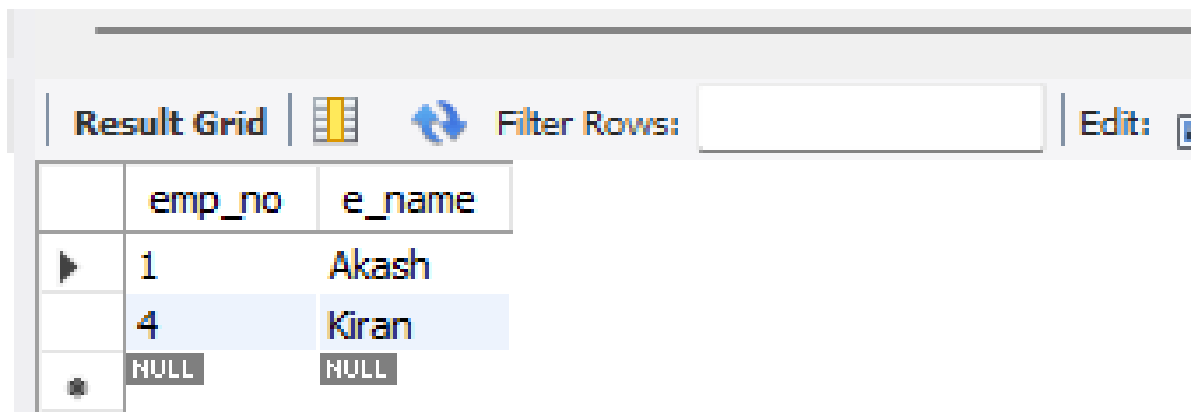


The screenshot shows a database query result grid. The query is: `select e.e_name max(i.incentive_amount) d.d_name a.job role`. The result grid has a single column labeled `emp_no`. The data rows are 1, 3, and 5. The grid also includes a 'Filter Rows' field, an 'Export' button, and a 'Wrap Cell Content' checkbox.

emp_no
1
3
5

QUERY 2

```
select emp_no,e_name from emp
where emp_no in (select emp_no from incentives
where incentive_amount=0);
```



The screenshot shows a database query result grid. The query is: `select emp_no,e_name from emp where emp_no in (select emp_no from incentives where incentive_amount=0);`. The result grid has two columns: `emp_no` and `e_name`. The data rows are 1 (Akash), 4 (Kiran), and a row with NULL values. The grid also includes a 'Filter Rows' field and an 'Edit' button.

emp_no	e_name
1	Akash
4	Kiran
NULL	NULL

QUERY 3

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

Result Grid

Filter Rows:




Export:

Wrap Cell Content:

	e_name	emp_no	d_name	job_role	d_loc	p_loc
▶	Bhuvan	2	ECE	Assistant	Pune	Pune
	Santosh	6	ISE	Supervisor	Sirsi	Sirsi

SPOT QUERY

```
select
e.e_name,max(i.incentive_amount),d.d_name,a.job_role
from emp e,dept d,assigned_to a,incentives i
where e.emp_no in(select emp_no
from incentives
where incentive_amount=
(select max(incentive_amount)
from incentives
where incentive_date between '2022-01-01' and '2022-
12-31'))
and d.dept_no=e.dept_no and a.emp_no=e.emp_no;
```

Result Grid   Filter Rows: <input type="text"/> Export:  Wrap Cell Content				
	e_name	max(i.incentive_amount)	d_name	job_role
▶	Chris	9800	ISE	Co-assistant