

week 6

TO DO

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

```
create database 1bm21cs052_employee2;
```

```
use 1bm21cs052_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);
```

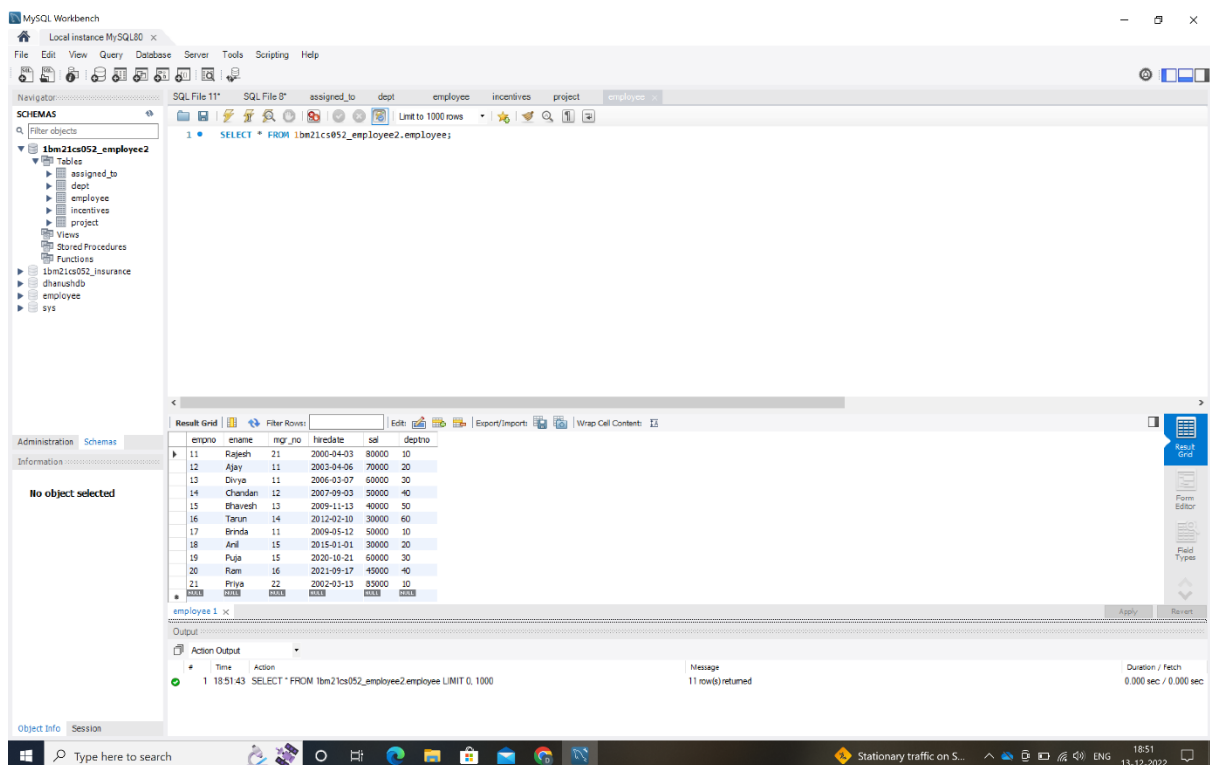
```
insert into incentives values(11,'2012-09-08',40000);
insert into incentives values(12,'2015-07-10',33000);
insert into incentives values(13,'2019-01-21',7000);
insert into incentives values(14,'2019-01-05',8000);
insert into incentives values(15,'2019-01-13',5000);
insert into incentives values(17,'2021-03-17',6000);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

```



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

```

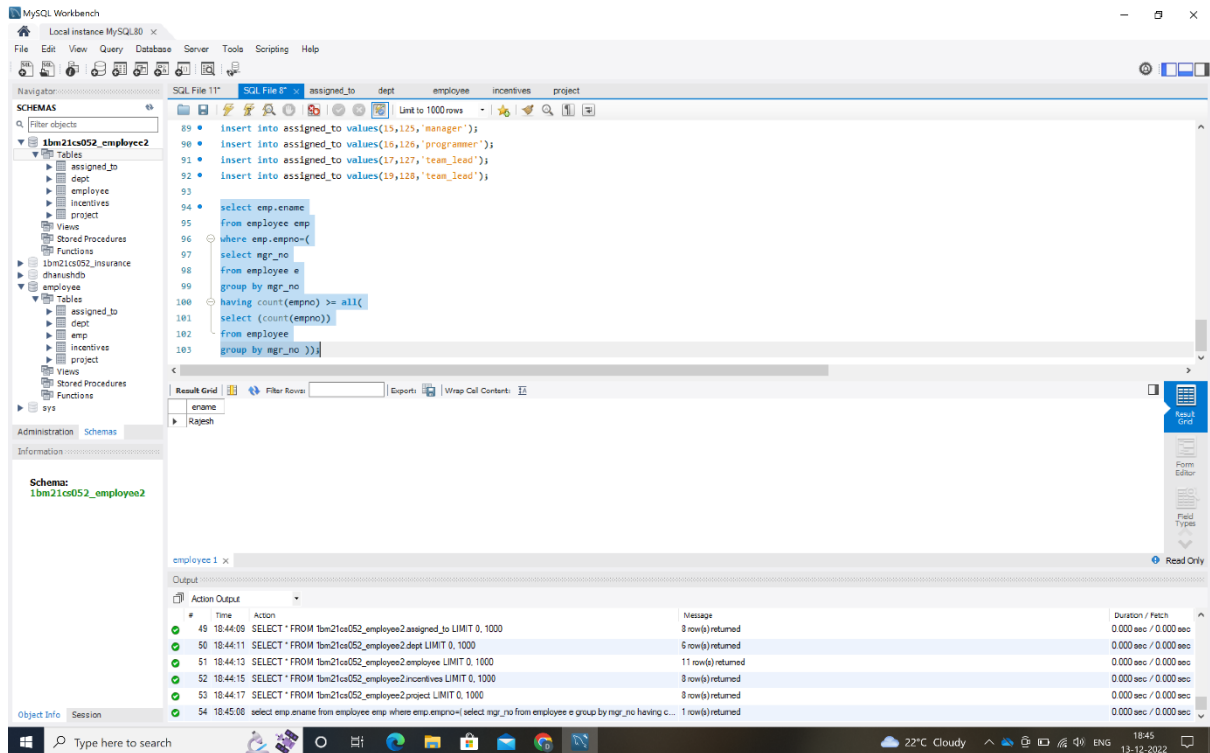
select emp.ename
from employee emp
where emp.empno=(
select mgr_no
from employee e
group by mgr_no

```

```

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

```

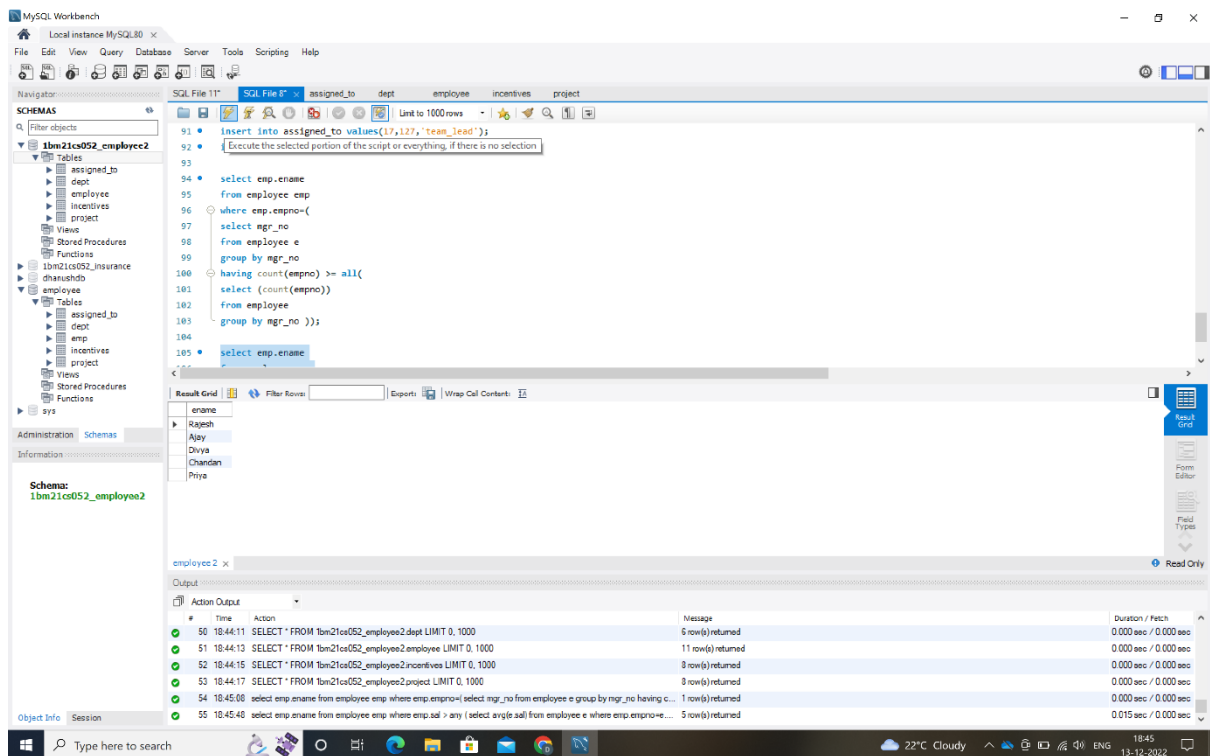


4. Display those managers name whose salary is more than average salary of his employee.

```

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

```



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

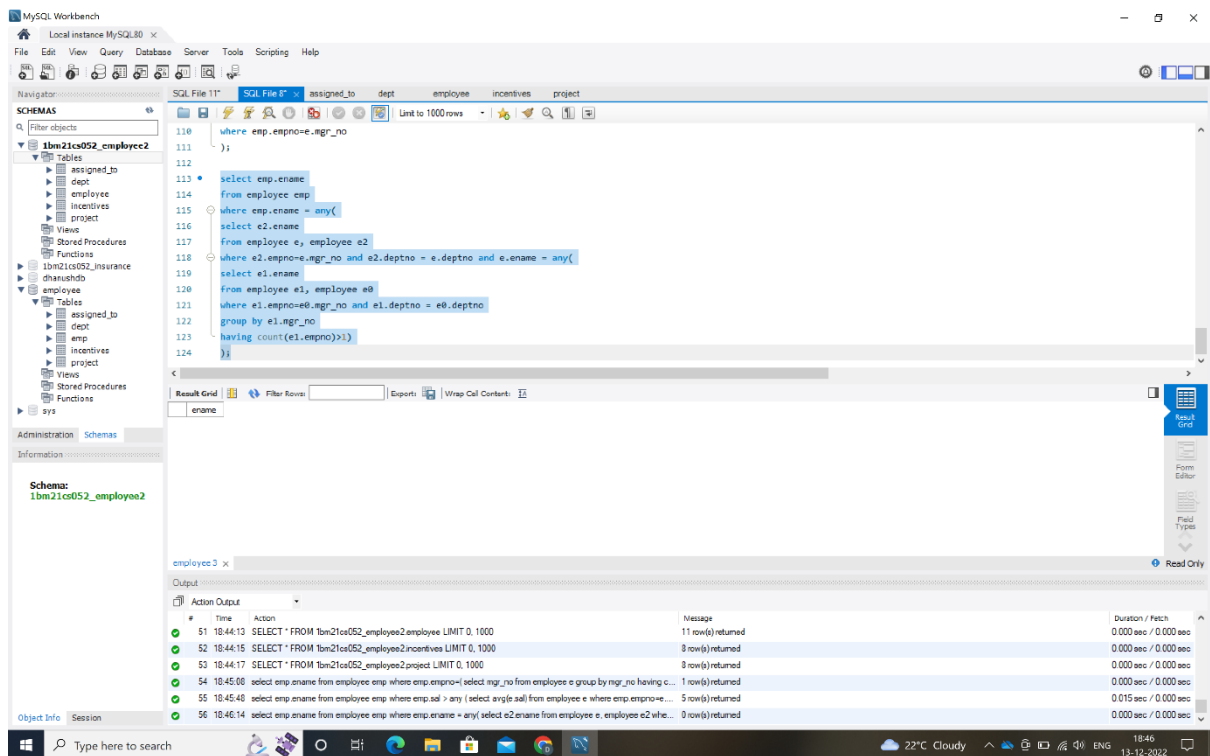
from employee e1, employee e0

where e1.empno=e0.mgr_no and e1.deptno = e0.deptno

group by e1.mgr_no

having count(e1.empno)>1)

);



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

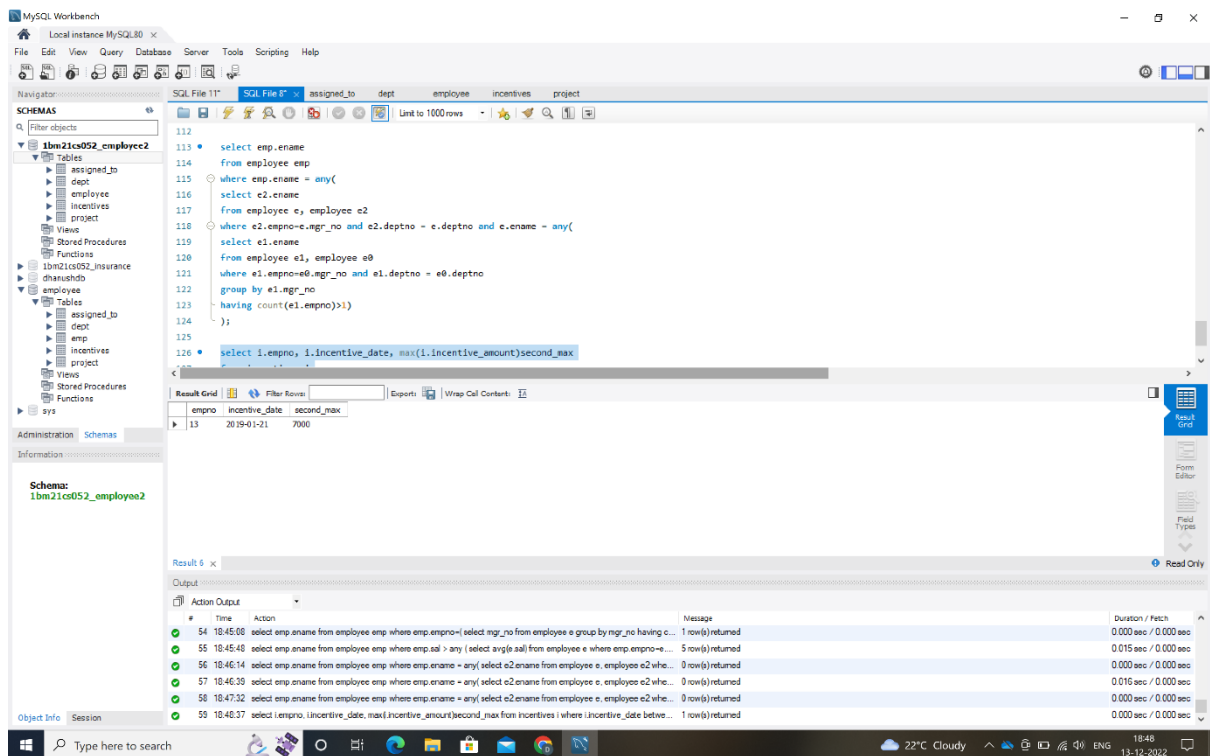
from incentives i

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');

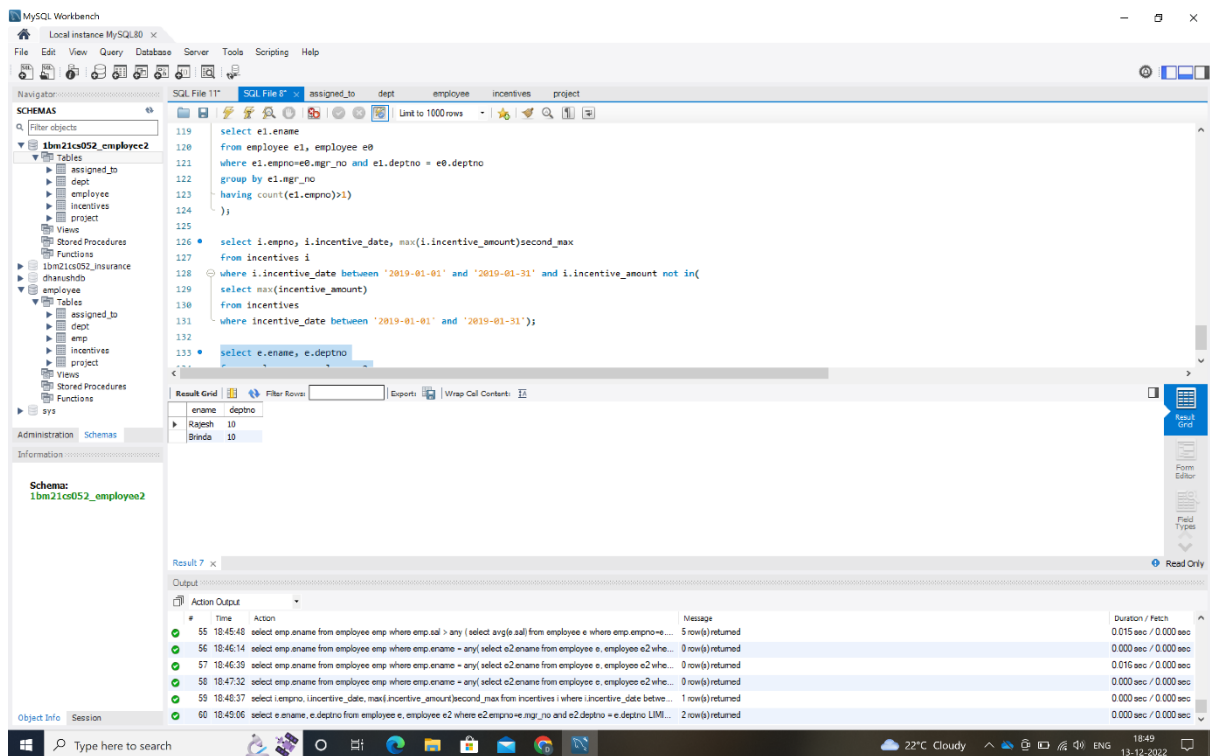


7. Display those employees who are working in the same department where his manager is working.

select e.ename, e.deptno

from employee e, employee e2

where e2.empno=e.mgr_no and e2.deptno = e.deptno;



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';

MySQL Workbench

Local instance MySQL80

File Edit View Query Database Server Tools Scripting Help

Navigator

Filter objects

1bm21cs052_employee2

Tables

assigned_to

dept

employee

incentives

project

Views

Stored Procedures

Functions

1bm21cs052_insurance

dbarsubdb

employee

Tables

assigned_to

dept

emp

incentives

project

Views

Stored Procedures

Functions

sys

Administration Schemas

Information

Schema:

1bm21cs052_employee2

SQL File 11

SQL File 8

assigned_to dept employee incentives project

Limit to 1000 rows

Execute the selected portion of the script or everything, if there is no selection

```
124 )
125
126 • select i.empno, i.incentive_date, max(i.incentive_amount)second_max
127 from incentives i
128 where i.incentive_date between '2019-01-01' and '2019-01-31' and i.incentive_amount not in(
129 select max(incentive_amount)
130 from incentives
131 where incentive_date between '2019-01-01' and '2019-01-31');
132
133 • select e.name, e.deptno
134 from employee e, employee e2
135 where e2.empno=e.mgr_no and e2.deptno = e.deptno;
136
137
138 • select i.empno, i.incentive_amount
```

Result Grid

empno	incentive_amount
15	3000

Output

incentives 9

Read Only

#	Time	Action	Message	Duration / Fetch
57	18:46:39	select emp.ename from employee emp where emp.ename = any(select e2.ename from employee e, employee e2 where	0 row(s) returned	0.016 sec / 0.000 sec
58	18:47:32	select emp.ename from employee emp where emp.ename = any(select e2.ename from employee e, employee e2 where	0 row(s) returned	0.000 sec / 0.000 sec
59	18:48:37	select i.empno, i.incentive_date, max(i.incentive_amount)second_max from incentives i where i.incentive_date between	1 row(s) returned	0.000 sec / 0.000 sec
60	18:49:06	select e.ename, e.deptno from employee e, employee e2 where e2.empno=e.mgr_no and e2.deptno = e.deptno LIMIT	2 row(s) returned	0.000 sec / 0.000 sec
61	18:50:09	select i.empno, i.incentive_amount from incentives i where 3 = (select count(*) from incentives) where incentive_date...	1 row(s) returned	0.000 sec / 0.000 sec
62	18:50:26	select i.empno, i.incentive_amount from incentives i where 3 = (select count(*) from incentives) where incentive_date...	1 row(s) returned	0.000 sec / 0.000 sec

Object Info Session

Type here to search

21°C Cloudy

18:50

13-12-2022