

WEEK 5 - DBMS LAB

By V. Kenny Philip

```
create database employee;
```

```
use employee;
```

```
create table dept(
```

```
dept_no int,
```

```
d_name varchar(20),
```

```
d_loc varchar(20),
```

```
primary key(dept_no)
```

```
);
```

```
create table project(
```

```
p_no int,
```

```
p_name varchar(20),
```

```
p_loc varchar(20),
```

```
primary key(p_no)
```

```
);
```

```
create table employee(
```

```
emp_no int,
```

```
e_name varchar(20),
```

```
mgr_no int,
```

```
hire_date date,
```

```
sal int,
```

```
dept_no int,
```

```
primary key(emp_no),
```

```
foreign key(dept_no) references dept(dept_no) on delete cascade  
);
```

```
create table incentives(  
    emp_no int,  
    incentive_date date,  
    incentive_amt int,  
    primary key(emp_no, incentive_date),  
    foreign key(emp_no) references employee(emp_no) on delete  
    cascade  
);
```

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

```
insert into dept values(1,'survey','Bangalore');  
insert into dept values(2,'architecture','Hyderabad');  
insert into dept values(3,'Test Team','Mysore');  
insert into dept values(4,'Finance','Delhi');  
insert into dept values(5,'Engineering','Bombay');
```

insert into dept values(6,'R and D','Dharwad');

insert into project values(1,'Royal Bridge','Bangalore');

insert into project values(2,'Hotel Management','Jammu');

insert into project values(3,'Railway Station','Chennai');

insert into project values(4,'Sunshine Motors','Bombay');

insert into project values(5,'Vedang's Restaurant','Mangalore');

insert into project values(6,'Central Airport','Goa');

insert into project values(7,'Theme Park','Mysore');

insert into project values(8,'JJ college','Hyderabad');

insert into employee values(10,'Dev',101,'2016-11-21',50000,2);

insert into employee values(11,'Arjun',102,'2015-1-12',20000,3);

insert into employee values(12,'Rahul',103,'2016-11-21',35000,6);

insert into employee values(13,'Sam',104,'2020-12-21',60000,5);

insert into employee values(14,'Kenny',105,'2019-09-15',15000,6);

insert into employee values(15,'Ram',106,'2012-05-13',50000,4);

insert into employee values(16,'Varun',107,'2021-07-01',20000,1);

insert into employee values(17,'Jay',108,'2016-04-13',40000,2);

insert into incentives values(13,'2021-11-5',5000);

insert into incentives values(11,'2019-01-21',2000);

insert into incentives values(14,'2020-10-15',8000);

insert into incentives values(15,'2015-11-15',10000);

```
insert into incentives values(15,'2021-11-05',9000);
```

```
insert into assigned_to values(10,2,'Leader');
```

```
insert into assigned_to values(17,2,'Architect');
```

```
insert into assigned_to values(11,3,'Testing Lead');
```

```
insert into assigned_to values(13,1,'Site Engineering');
```

```
insert into assigned_to values(13,3,'Site Engineering');
```

```
insert into assigned_to values(14,3,'Survey Lead');
```

```
insert into assigned_to values(15,6,'Finanace Manager');
```

```
insert into assigned_to values(10,4,'Architect');
```

```
insert into assigned_to values(15,5,'Finance Manager');
```

```
insert into assigned_to values(14,1,'Survey Lead');
```

```
insert into assigned_to values(11,7,'Testing Lead');
```

```
insert into assigned_to values(10,5,'Leader');
```

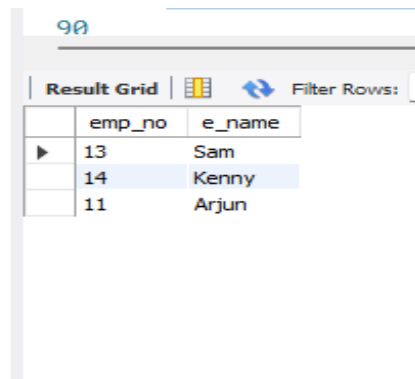
```
SET FOREIGN_KEY_CHECKS=0;
```

```
SET GLOBAL FOREIGN_KEY_CHECKS=0;
```

QUERIES

1. Retrieve the employee numbers of all employees who work on project located in Bengaluru, Hyderabad, or Mysuru

```
select distinct e.emp_no,e.e_name
from employee e,assigned_to a,project p
where e.emp_no=a.emp_no and a.p_no=p.p_no
and p.p_loc IN('Bangalore','Hyderabad','Mysore');
```

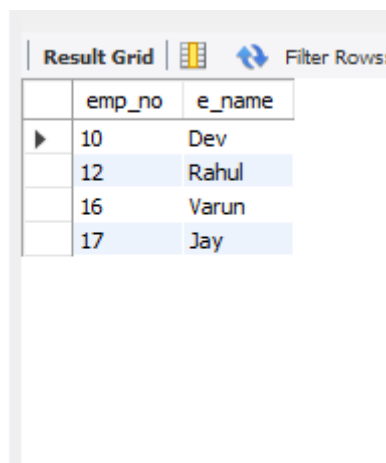


A screenshot of a database query result grid. The grid has two columns: 'emp_no' and 'e_name'. It contains three rows of data: (13, Sam), (14, Kenny), and (11, Arjun). The row for Kenny is highlighted in blue. Above the grid, there is a search bar with the text '90' and a 'Filter Rows' button.

	emp_no	e_name
▶	13	Sam
	14	Kenny
	11	Arjun

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

```
select distinct e.emp_no,e.e_name
from employee e,incentive i
where e.emp_no not in(select i.emp_no from incentive i);
```



A screenshot of a database query result grid. The grid has two columns: 'emp_no' and 'e_name'. It contains four rows of data: (10, Dev), (12, Rahul), (16, Varun), and (17, Jay). The rows for Rahul, Varun, and Jay are highlighted in blue. Above the grid, there is a search bar and a 'Filter Rows' button.

	emp_no	e_name
▶	10	Dev
	12	Rahul
	16	Varun
	17	Jay

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

Result Grid						
		Filter Rows:		Export:		Wrap Cell Cc
	e_name	emp_no	dept_no	job_role	p_loc	d_loc
▶	Arjun	11	3	Testing Lead	Mysore	Mysore