

**\* Try to create the following Queries:**

1. Display the ids, names and locations of the projects which controlled with department 10.

```
select Pnumber,Pname,Plocation
from PROJECT
where Dnum=10
```

2. Display the Department id, name and id and the name of its manager.

```
select Dname,Dnum,Fname+' '+Lname "Full name",SSN
from Departments join Employee
on Dnum=Dno
```

3. Display the name of the departments and the name of the projects under its control.

```
select Dname , Pname
from Departments d join Project p
on d.Dnum = p.Dnum
```

4. Display the full data about all the dependence associated with the name of the employee they depend on him/her.

```
select dd.* ,e.Fname+' '+e.Lname "The name of the employee "
from Dependent dd join Employee e
on dd.ESSN=e.SSN
```

5. Display the Id, name and location of the projects in Cairo or Alex city.

```
select Pname ,Pnumber , city
from Project
where City in ('Cairo','Alex')
```

6. Display the Projects full data of the projects with a name starts with "a" letter.

```
select *
from Project
where Pname like 'a%'
```

7. display all the employees in department 30 whose salary from 1000 to 2000 LE monthly

```
select *
from Employee e join Departments d
on e.Dno=d.Dnum
where e.Salary>=1000 and e.Salary<=2000
```

8. Retrieve the names of all employees in department 10 who works more than or equal 10 hours per week on "AL Rabwah" project.

```
Select e.Fname+' '+e.Lname "Full name"
from Employee e join Works_for w
on (e.SSN=w.ESSN)
join Project p
on (p.Pnumber=w.Pno)
where Dno = 10 and w.Hours >= 10 and p.Pname='AL Rabwah'
```

9. Find the names of the employees who directly supervised with Kamel Mohamed.

```
Select emp.Fname+' '+emp.Lname "Full name"
from Employee emp join Employee mgr
on mgr.SSN=emp.Superssn
where mgr.Fname='Kamel' and mgr.Lname='Mohamed'
```

10. Retrieve the names of all employees and the names of the projects they are working on, sorted by the project name.

```
Select e.Fname+' '+e.Lname "Full name " ,pname " name of project"
from Employee e join Works_for w
on (e.SSN=w.ESSN)
join Project p
on (w.Pno=p.Pnumber)
order by p.Pname
```

11. For each project located in Cairo City , find the project number, the controlling department name ,the department manager last name ,address and birthdate.

```
select p.Pnumber , d.Dname ,e.Fname+' '+e.Lname "manager name " ,e.Address,e.Bdate
from Project p join Departments d
on (p.Dnum=d.Dnum)
join Employee e
on (d.MGRSSN=e.SSN)
where p.Plocation='Cairo'
```

12. Display All Data of the managers

```
select e.*
from Employee e join Departments d
on (e.SSN=d.MGRSSN)
```

13. Display All Employees data and the data of their dependents even if they have no dependents

```
select e.*, dd.*
from Employee e left join Dependent dd
on (e.SSN=dd.ESSN)
```

14. Display (Using Union Function)

- The name and the gender of the dependence that's gender is Female and depending on Female Employee.
- And the male dependence that depends on Male Employee.

```
select dd.Dependent_name,dd.Sex
from Dependent dd join Employee e
on dd.ESSN=e.SSN
where dd.Sex='Female' and e.Sex='Female'
union
select dd.Dependent_name,dd.Sex
from Dependent dd join Employee e
on dd.ESSN=e.SSN
where dd.Sex = 'Male' and e.Sex = 'Male'
```

15. List the full name of all managers who have no dependents

```
select e.Fname+' '+e.Lname "Full name "
from Employee e join Departments d
on (e.SSN=d.MGRSSN)
except
select e.Fname+' '+e.Lname "Full name "
from Employee e join Departments dd
on (e.SSN=dd.Dnum)
```