

**CS2801T – Database Management System Lab**

**Exercise :**

From following Relational Schema, fetch the data based on the questions given.

- Student (RollNo, Name, Degree, Year, Sex, DeptNo, Advisor).
- Department (DeptId, Name, HoD, Phone).
- Professor (EmpId, Name, Sex, StartYear, DeptNo, PhoneNo).
- Course (CourseId, CourseName, Credits, DeptNo).
- Enrollment (RollNo, CourseId, Sem, Year, Grade).
- Teaching (EmpId, CourseId, Sem, Year, Classroom).
- Prerequisite (Prereqcourse, courseId). [Prereqcourse: Complete C1 before enrolling C2].

1. Get the RollNo, Name of all the women students in the DeptNo 5.  
Select RollNo, Name from Student where Sex = 'F' and DeptNo = 5;
2. Get the EmpId, Name and PhoneNo of professors in the CSE dept (DeptNo = 3) who have joined after 1999.  
Select EmpId, Name, Phone from Professor where DeptNo = 3 and StartYear > 1999;
3. Get the RollNo, Name of students in the CSE dept (DeptNo = 3) along with their advisor's name and PhoneNo.  
Select RollNo, s.Name, f.Name as AdvisorName, phone as AdvisorPhone from Student as s, Professor as f where s.Advisor = f.EmpId and s.DeptNo = 3;
4. Get the Names, EmpId's, PhoneNos of the professors in the CSE dept who joined before 1995.  
Select EmpId, f.Name, f.Phone from Professor as f, Department as d where f.DeptNo = d.DeptId and d.Name = 'CSE' and f.StartYear < 1995

**Nested Query:**

1. Get the RollNo, Name of the students who have a lady professor as their advisor.  
Select s.RollNo, s.Name from Student s where s.Advisor IN (select EmpId from Professor where Sex = 'F');
2. Get the EmpId, Name of the senior-most professor.  
Select p.EmpId, p.Name from Professor p where p.StartYear <= ALL (select distinct StartYear from Professor);