CS - 571
Database Systems
for BS (CS)

Lecture: Practice Questions

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Select Command

Find the designation names whose grades are not yet assigned.

Employee [EmpNo, Ename, DesignationID]
Designation [DesignationID, DesignationName, Grade]
Employee_Designation [EmpNo, DesignationID, SalaryPaid]
Department [FacultyID, FacultyName, DepartmentID, DepartmentName]
Employee_Department [EmpNo, DepartmentID]

Select Command

Find the designation names whose grades are not yet assigned.

```
Select Designation
From Designation
Where Grade is NULL
```

Employee [EmpNo, Ename, DesignationID]
Designation [DesignationID, DesignationName, Grade]
Employee_Designation [EmpNo, DesignationID, SalaryPaid]
Department [FacultyID, FacultyName, DepartmentID, DepartmentName]
Employee_Department [EmpNo, DepartmentID]

Select Command

How much would be the salary each employeeID, if the salary he receives is doubled.

Employee [EmpNo, Ename, DesignationID]
Designation [DesignationID, DesignationName, Grade]
Employee_Designation [EmpNo, DesignationID, SalaryPaid]
Department [FacultyID, FacultyName, DepartmentID, DepartmentName]
Employee_Department [EmpNo, DepartmentID]

Select Command

How much would be the salary of each employee whose ID is above 100, if the salary he receives is doubled.

```
Select SalaryPaid*2 Double_Salary
From Employee_Designation
Where Employee > 100;
```

Employee [EmpNo, Ename, DesignationID]
Designation [DesignationID, DesignationName, Grade]
Employee_Designation [EmpNo, DesignationID, SalaryPaid]
Department [FacultyID, FacultyName, DepartmentID, DepartmentName]
Employee_Department [EmpNo, DepartmentID]

Select Command

Show the names of employees and their designation in the following format. *Khurram* is working as *Assist Prof*

Employee [EmpNo, Ename, DesignationID]
Designation [DesignationID, DesignationName, Grade]
Employee_Designation [EmpNo, DesignationID, SalaryPaid]
Department [FacultyID, FacultyName, DepartmentID, DepartmentName]
Employee_Department [EmpNo, DepartmentID]

Select Command

Show the Names and designation of the employees who are Lecturers, Assistant Professor or Associate Professor.

Employee [EmpNo, Ename]
Designation [DesignationID, DesignationName, Grade]
Employee_Designation [EmpNo, DesignationID, SalaryPaid]
Department [FacultyID, FacultyName, DepartmentID, DepartmentName]
Employee_Department [EmpNo, DepartmentID]

Select Command

Show the Names and designation of the employees who are Lecturers, Assistant Professor or Associate Professor.

```
Select Ename, DesignationName
From Employee E, Designation D, Employee_Designation ED
Where E.EmpNo = ED.EmpNo
AND ED.EmpNo = DesignationID
Where DesignationName IN ('Lectures', 'Assistant
Professor', 'Associate Professor');
```

Employee [EmpNo, Ename]
Designation [DesignationID, DesignationName, Grade]
Employee_Designation [EmpNo, DesignationID, SalaryPaid]
Department [FacultyID, FacultyName, DepartmentID, DepartmentName]
Employee_Department [EmpNo, DepartmentID]

Select Command

Show the Department names of the employees, whose salaries are between 100,000 and 200,000.

Employee [EmpNo, Ename]
Designation [DesignationID, DesignationName, Grade]
Employee_Designation [EmpNo, DesignationID, SalaryPaid]
Department [FacultyID, FacultyName, DepartmentID, DepartmentName]
Employee_Department [EmpNo, DepartmentID]

Select Command

Show the Department names of the employees, whose salaries are between 100,000 and 200,000.

```
Select DepartmentName
From Department D, Employee_Department ED, Employee E,
Employee_Designation EmpD, Designation DES
Where D.DepartmentID = ED.DepartmentID
AND ED.EmpNo = E.EmpNo
And E.EmpNo = DES.DesignationID …
AND SalaryPaid Between 100,000 and 200,000;
```

Employee [EmpNo, Ename]
Designation [DesignationID, DesignationName, Grade]
Employee_Designation [EmpNo, DesignationID, SalaryPaid]
Department [FacultyID, FacultyName, DepartmentID, DepartmentName]
Employee_Department [EmpNo, DepartmentID]

Select Command

Show the names of the employees whose names start with K.

Employee [EmpNo, Ename]
Designation [DesignationID, DesignationName, Grade]
Employee_Designation [EmpNo, DesignationID, SalaryPaid]
Department [FacultyID, FacultyName, DepartmentID, DepartmentName]
Employee_Department [EmpNo, DepartmentID]

Select Command

Show the names of the employees whose names start with K.

```
Select EName
From Employee
Where Ename like 'K%'
```

Employee [EmpNo, Ename]
Designation [DesignationID, DesignationName, Grade]
Employee_Designation [EmpNo, DesignationID, SalaryPaid]
Department [FacultyID, FacultyName, DepartmentID, DepartmentName]
Employee_Department [EmpNo, DepartmentID]

Select Command

Compute the total salary paid by the institute each year.

Employee [EmpNo, Ename]
Designation [DesignationID, DesignationName, Grade]
Employee_Designation [EmpNo, DesignationID, SalaryPaid]
Department [FacultyID, FacultyName, DepartmentID, DepartmentName]
Employee_Department [EmpNo, DepartmentID]

Select Command

Compute the total salary paid by the institute each year.

```
Select Sum(SalaryPaid*12)
From Employee_Designation
```

Employee [EmpNo, Ename]
Designation [DesignationID, DesignationName, Grade]
Employee_Designation [EmpNo, DesignationID, SalaryPaid]
Department [FacultyID, FacultyName, DepartmentID, DepartmentName]
Employee_Department [EmpNo, DepartmentID]

Select Command

Compute the total salary paid by the each department of the institute along with the department name.

Employee [EmpNo, Ename]
Designation [DesignationID, DesignationName, Grade]
Employee_Designation [EmpNo, DesignationID, SalaryPaid]
Department [FacultyID, FacultyName, DepartmentID, DepartmentName]
Employee_Department [EmpNo, DepartmentID]

Select Command

Compute the total salary paid by the each department of the institute along with the department name.

```
Select DepartmentName, Sum(SalaryPaid*12)
From Department D, Employee_Department ED, Employee E,
Employee_Designation EMPD
Where D.DepartmentID = ED.EmpNO
AND E. EmpNo = ED.EmpNo
AND Desig.DesignatoinID = E.EmpNo
Group by Department ID / DepartmentName;
```

Employee [EmpNo, Ename]
Designation [DesignationID, DesignationName, Grade]
Employee_Designation [EmpNo, DesignationID, SalaryPaid]
Department [FacultyID, FacultyName, DepartmentID, DepartmentName]
Employee_Department [EmpNo, DepartmentID]

Select Command

Generate the list of all employees their respective designations and all designations.

Employee [EmpNo, Ename]
Designation [DesignationID, DesignationName, Grade]
Employee_Designation [EmpNo, DesignationID, SalaryPaid]
Department [FacultyID, FacultyName, DepartmentID, DepartmentName]
Employee_Department [EmpNo, DepartmentID]

Select Command

Generate the list of all employees (names only) their respective designations and all designations (names only).

```
Select Ename, DesignationName
From Employee E, Employee_Designation ED, Designation D
Where E. EmpNo = ED.EmpNo (+)
AND ED.DesignatoinID = D.DesignationID (+);
```

Employee [EmpNo, Ename]
Designation [DesignationID, DesignationName, Grade]
Employee_Designation [EmpNo, DesignationID, SalaryPaid]
Department [FacultyID, FacultyName, DepartmentID, DepartmentName]
Employee_Department [EmpNo, DepartmentID]