

Semester 04 (Fall 2024)

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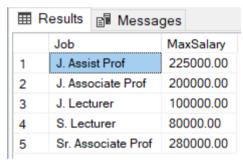
Exercises

Now by using the student information system, formulate the following queries in SQL

1. Display the Job and maximum salary of all designations using teachers table.

Query:

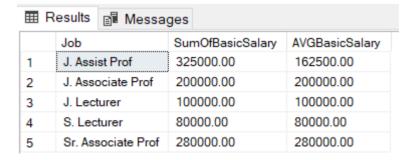
select Job,max(BasicSalary) as 'MaxSalary' from Teacher group by Job



2. Display Sum and Average Salary of each job type from employees table.

Query:

select Job,sum(BasicSalary) as 'SumOfBasicSalary',avg(BasicSalary) as 'AVGBasicSalary' from
Teacher group by Job

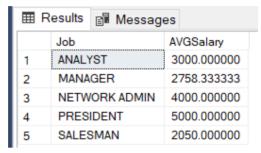


Name: Syed Muhammad Raza Ali (02-134231-028)

3. Display Job Titles where average salary (basic + commission) of employees is greater than 1400. Use employee table.

Query:

 $select\ Job, avg(sal\ +\ isnull(comm, 0))\ as\ 'AVGSalary'\ from\ emp\ group\ by\ Job\ having\ avg(sal\ +\ isnull(comm, 0))>1400$



4. Display the Total Number of teachers who have no house rent.

Query:

select count(*) as 'NoHouseRent' from Teacher where HouseRent is null

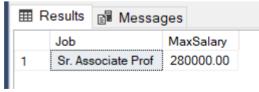
Results Messages

NoHouseRent
1 2

5. Select designation, maximum salary of that designation from teacher's table where maximum salary is greater than 230 K. Show records in descending order with respect to salary.

Query:

select Job,max(BasicSalary) as 'MaxSalary' from Teacher group by Job having
max(BasicSalary)>230000 order by 'MaxSalary' desc

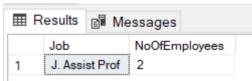


Name: Syed Muhammad Raza Ali (02-134231-028)

6. Write a query to display Job Title and number of faculty where job title is "J. Assist Prof".

Query:

 ${\tt select\ Job,count(*)\ as\ NoOfEmployees\ from\ Teacher\ where\ Job\ like\ 'J.\ Assist\ Prof'\ group\ by\ Job\ Count(*)\ as\ NoOfEmployees\ from\ Teacher\ where\ Job\ like\ 'J.\ Assist\ Prof'\ group\ by\ Job\ Count(*)\ as\ NoOfEmployees\ from\ Teacher\ where\ Job\ like\ 'J.\ Assist\ Prof'\ group\ by\ Job\ Count(*)\ as\ NoOfEmployees\ from\ Teacher\ where\ Job\ like\ 'J.\ Assist\ Prof'\ group\ by\ Job\ Count(*)\ as\ NoOfEmployees\ from\ Teacher\ where\ Job\ like\ 'J.\ Assist\ Prof'\ group\ by\ Job\ Count(*)\ as\ NoOfEmployees\ from\ Teacher\ where\ Job\ like\ 'J.\ Assist\ Prof'\ group\ by\ Job\ Count(*)\ as\ NoOfEmployees\ from\ Teacher\ where\ Job\ like\ 'J.\ Assist\ Prof'\ group\ by\ Job\ Count(*)\ Assist\ Prof'\ group\ by\ Job\ Count(*)\ As\ NoOfEmployees\ from\ Teacher\ where\ Job\ like\ 'J.\ Assist\ Prof'\ group\ by\ Job\ Count(*)\ As\ NoOfEmployees\ from\ Teacher\ where\ Job\ like\ 'J.\ As\ NoOfEmployee\ from\ Teacher\ where\ Job\ like\ 'J.\ As\ NoOfEmployee\ from\ Teacher\ where\ Job\ like\ 'J.\ As\ NoOfEmployee\ from\ Teacher\ where\ Job\ like\ Teacher\ where$



7. Write a query that displays employee names and their salaries who joined company before January 1, 1984. Format the date in the given manner and then display.

Query:

```
select TeacherName, BasicSalary, format(TeacherDOJ, 'mmm-dd-yyyy') as NewTeacherDOJ from Teacher where TeacherDOJ < '1984-01-01' group by TeacherName, BasicSalary, TeacherDOJ

| Results | Messages |
| TeacherName | BasicSalary | NewTeacherDOJ |
```

8. Write a query to display job title, number of employees and average salary (basic + commission) of all employees in that particular job title. Label columns as job title, Number of Employees, and Average Salary respectively. Round the average salary to three decimal places.

Query:

select Job as 'JobTitle', count(*) as 'NumberOfEmp', round(avg(sal),3) as 'AvgSalary' from empgroup by job

