

**Information System Management Lab  
BCOM 307**

**Assignment #19**

**Submitted by:**

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## Maharaja Agrasen Institute of Management Studies

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Department of Commerce

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### Assignment No. 19

Unit No:

Course/Subject Code: BCOM 307

Issue Date

Subject Title: Information System Management Lab

Last Date of Submission:

#### Instructions for Students:

1. **All Questions are Compulsory.**
2. The student should attach proper cover page for each assignment clearly mentioning the Assignment No.
3. Each assignment should be prepared by the student individually with proper explanation and screenshots.
4. A4 size ruled sheets should be used for the assignment.
5. Assignment pages should be serially numbered at the bottom of page.

*During online education mode, upload scanned copy of the complete assignment including cover page latest by due date.*

Question No.	Question	CO No.
1	Find the average salary of the employees from the employees table.	CO1, CO2, CO3, CO4
2	Find the minimum salary and the maximum salary of the employees table.	
3	Find the sum of commission of the employees table.	
4	Display the average salary of employees whose hire date is greater than 01-01-1960.	
5	List the names of all the employees with salary greater than equal to 2000 and commission greater than equal to 200.	
6	List the names of all the employees having 'a' as second letter in their names, and salary greater than equal to 1000.	
7	Count the number of employees having commission less than 500.	
8	Determine the maximum and minimum commission of the employees table, and rename the output as 'Max_Commission' and	

	'Min_Commission'.	<b>CO1, CO2, CO3, CO4</b>
9	List the employees whose salary is more than 1000. Calculate a new salary as original salary*0.15, and rename the output as 'new salary'.	

**ASSIGNMENT 19 - PRACTICE QUESTIONS****Task 1 : Find the average salary of the employees from the employees table.**

This task can be completed using the **AVG()** aggregate function.

The screenshot shows a database query editor window titled "ISM\_Lab\_Assignment\_19-YashJain\_BCom5A". The query is: `select avg(salary) from employees;`. The result grid shows a single row with the average salary.

#	avg(salary)
1	3000.0000

**Task 2: Find the minimum salary and the maximum salary of the employees table.**

This task can be completed using the **GROUP BY** clause, the **WHERE** clause and the **MAX()**, and **MIN()** aggregate functions.

The screenshot shows a database query editor window titled "ISM\_Lab\_Assignment\_19-YashJain\_BCom5A". The query is: `select min(salary),max(salary) from employees;`. The result grid shows a single row with the minimum and maximum salary.

#	min(salary)	max(salary)
1	1500	4500

**Task 3: Find the sum of commission of the employees table.**

This task can be completed using the **SUM()** aggregate function.

The screenshot shows a SQL IDE window titled "ISM\_Lab\_Assignment\_19-YashJain\_BCom5A". The query editor contains the following SQL code:

```
10  
11 #displaying total commission  
12 • select sum(commission) from employees;
```

The "Result Grid" at the bottom shows the execution result:

#	sum(commission)
1	900

**Task 4: Display the average salary of employees whose hire date is greater than 01-01-1960.**

This task can be completed using the **AVG( )** aggregate function, along with the **WHERE** clause.

The screenshot shows a SQL IDE window titled "ISM\_Lab\_Assignment\_19-YashJain\_BCom5A". The query editor contains the following SQL code:

```
13  
14 #displaying average salary of employees who joined after 1 Jan 1960  
15 • select avg(salary) from employees where hire_date>='1960-01-01';
```

The "Result Grid" at the bottom shows the execution result:

#	avg(salary)
1	3750.0000

**Task 5: List the names of all the employees with salary greater than equal to 2000 and commission greater than equal to 200.**

This task can be completed using the **AND** operator, and the **WHERE** clause.

The screenshot shows a SQL IDE window titled "ISM\_Lab\_Assignment\_19-YashJain\_BCom5A". The query editor contains the following SQL code:

```
16  
17 #displaying columns for employees who have salary >=2000 and commission>=200  
18 • select emp_name,salary,commission from employees where salary>=2000 and commission>=200;
```

The "Result Grid" at the bottom shows the execution result:

#	emp_name	salary	commission
1	Yash Jain	4500	450
2	Elon Musk	3000	300

**Task 6: List the names of all the employees having 'a' as second letter in their names, and salary greater than equal to 1000.**

This task can be completed using the **AND**, **LIKE** operators, and the **WHERE** clause.

```

19
20 #displaying columns for employees where name has second character 'a' and salary>=1000.
21 • select emp_name,salary from employees where Emp_Name like '_a%' and salary>=1000;

```

#	emp_name	salary
1	Yash Jain	4500
2	Ratan Tata	1500

**Task 7: Count the number of employees having commission less than 500.**

This task can be completed using the **COUNT()** aggregate function, along with the **WHERE** clause.

```

22
23 #counting the number of employees having commission less than 500rs
24 • select count(emp_name) from employees where commission<500;

```

#	count(emp_name)
1	3

**Task 8: Determine the maximum and minimum commission of the employees table, and rename the output as 'Max\_Commission' and 'Min\_Commission'.**

This task can be completed using the **WHERE** clause and the **MAX()**, and **MIN()** aggregate functions.

```

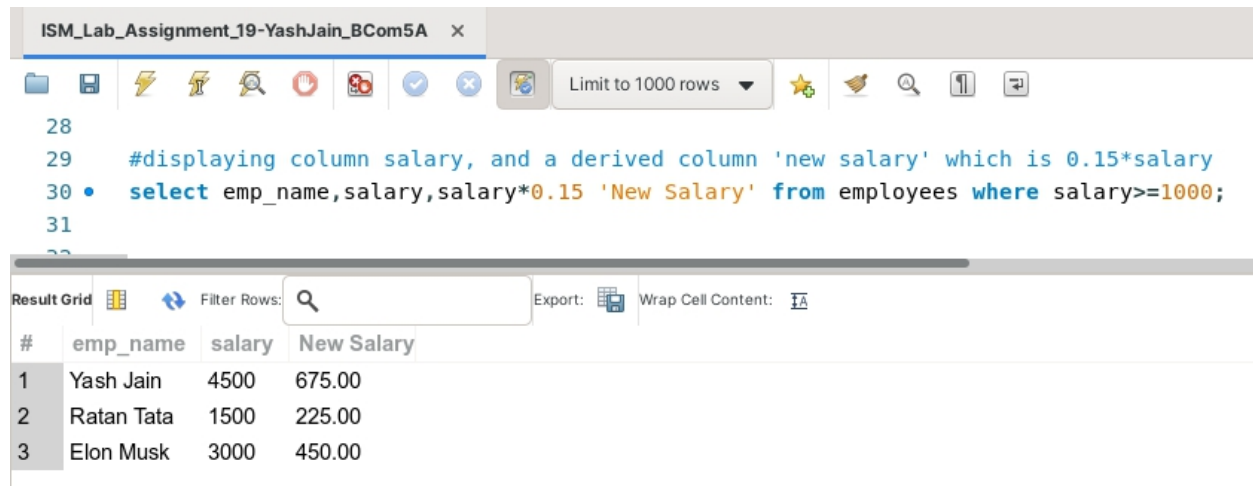
25
26 #displaying the maximum and minimum values of commission
27 • select max(commission) 'Max_Commission',min(commission) 'Min_Commission' from employees;

```

#	Max_Commission	Min_Commission
1	450	150

**Task 9: List the employees whose salary is more than 1000. Calculate a new salary as original salary\*0.15, and rename the output as 'new salary'.**

This task can be completed using the **WHERE** clause.



The screenshot shows a SQL IDE window titled "ISM\_Lab\_Assignment\_19-YashJain\_BCom5A". The query editor contains the following SQL code:

```
28
29 #displaying column salary, and a derived column 'new salary' which is 0.15*salary
30 • select emp_name,salary,salary*0.15 'New Salary' from employees where salary>=1000;
31
32
```

Below the query editor, the "Result Grid" shows the output of the query. It includes a search bar, an "Export" button, and a "Wrap Cell Content" checkbox. The results are displayed in a table with four columns: #, emp\_name, salary, and New Salary.

#	emp_name	salary	New Salary
1	Yash Jain	4500	675.00
2	Ratan Tata	1500	225.00
3	Elon Musk	3000	450.00