

# Assignment-5

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**Batch: 2<sup>nd</sup> year CSE**

**Create the table employee and solve the following queries.**

emp_id	emp_name	salary	dept_name
101	Amit	25000	IT
102	Sunil	20000	Sales
103	Rakesh	18000	MKTG
104	Ajay	16000	IT
105	Suhail	20000	Sales
106	Arif	18000	HR
107	Suresh	24000	Sales
108	Vijay	22000	MKTG

Query for creating the above table:

```
mysql> CREATE TABLE employee(  
-> emp_id int,  
-> emp_name varchar(20),  
-> salary int,  
-> dept_name varchar(20));
```

Query OK, 0 rows affected (0.11 sec)

```
mysql> DESC employee;
```

Field	Type	Null	Key	Default	Extra
emp_id	int	YES		NULL	
emp_name	varchar(20)	YES		NULL	
salary	int	YES		NULL	
dept_name	varchar(20)	YES		NULL	

4 rows in set (0.03 sec)

```
mysql> INSERT INTO employee VALUES  
-> (101, 'Amit',25000,'IT'),  
-> (102,'Sunil',20000,'Sales'),  
-> (103,'Rakesh',18000,'MKTG'),  
-> (104,'Ajay',16000,'IT'),
```

```
-> (105,'Suhail',20000,'Sales'),
-> (106,'Arif',18000,'HR'),
-> (107,'Suresh',24000,'Sales'),
-> (108,'Vijay',22000,'MKTG');
```

Query OK, 8 rows affected (0.02 sec)

Records: 8 Duplicates: 0 Warnings: 0

```
mysql> SELECT * FROM employee;
```

emp_id	emp_name	salary	dept_name
101	Amit	25000	IT
102	Sunil	20000	Sales
103	Rakesh	18000	MKTG
104	Ajay	16000	IT
105	Suhail	20000	Sales
106	Arif	18000	HR
107	Suresh	24000	Sales
108	Vijay	22000	MKTG

8 rows in set (0.01 sec)

## 1. Display total sum required to pay the salary of all employees.

### Answer:

```
mysql> SELECT SUM(salary) AS Total_Salary
-> FROM employee;
```

Total_Salary
163000

1 row in set (0.01 sec)

## 2. Display the average salary, minimum salary, and maximum salary of the company.

### Answer:

```
mysql> SELECT AVG(salary), MAX(salary), MIN(salary)
```

```
-> FROM employee;
```

```
+-----+-----+-----+
| AVG(salary) | MAX(salary) | MIN(salary) |
+-----+-----+-----+
| 20375.0000 | 25000 | 16000 |
+-----+-----+-----+
```

```
1 row in set (0.00 sec)
```

### 3. Display the sum of salary department-wise.

#### Answer:

```
mysql> SELECT dept_name, SUM(salary)
```

```
-> FROM employee
```

```
-> GROUP BY dept_name;
```

```
+-----+-----+
| dept_name | SUM(salary) |
+-----+-----+
| IT        | 41000 |
| Sales     | 64000 |
| MKTG      | 40000 |
| HR        | 18000 |
+-----+-----+
```

```
4 rows in set (0.00 sec)
```

### 4. Display the maximum salary department-wise.

#### Answer:

```
mysql> SELECT dept_name, MAX(salary)
```

```
-> FROM employee
```

```
-> GROUP BY dept_name;
```

```
+-----+-----+
| dept_name | MAX(salary) |
+-----+-----+
| IT        | 25000 |
| Sales     | 24000 |
| MKTG      | 22000 |
| HR        | 18000 |
+-----+-----+
```

4 rows in set (0.00 sec)

### 5.a. Display the details of the employee who earns the maximum salary.

#### Answer:

```
mysql> SELECT * FROM employee
      -> HAVING MAX(salary);
```

emp_id	emp_name	salary	dept_name
101	Amit	25000	IT

1 row in set (0.00 sec)

### 5.b. Display details of every employee having maximum salary in his department.

#### Answer:

```
mysql> SELECT * FROM employee a
      -> WHERE salary = ( SELECT MAX(salary) FROM employee b
      -> GROUP BY dept_name
      -> HAVING b.dept_name=a.dept_name);
```

emp_id	emp_name	salary	dept_name
101	Amit	25000	IT
106	Arif	18000	HR
107	Suresh	24000	Sales
108	Vijay	22000	MKTG

4 rows in set (0.00 sec)

### 6. Display the details of the employee who earns more salary than the average salary of his department.

#### Answer:

```
mysql> SELECT * FROM employee a
      -> WHERE salary > (SELECT AVG(salary) FROM employee b
      -> GROUP BY dept_name
      -> HAVING b.dept_name=a.dept_name);
```

```

+-----+-----+-----+-----+
| emp_id | emp_name | salary | dept_name |
+-----+-----+-----+-----+
|    101 | Amit     | 25000  | IT        |
|    107 | Suresh   | 24000  | Sales     |
|    108 | Vijay    | 22000  | MKTG      |
+-----+-----+-----+-----+
3 rows in set (0.00 sec)

```

## 7. Display total number of employees.

### Answer:

```

mysql> SELECT COUNT(emp_id) FROM employee;
+-----+
| COUNT(emp_id) |
+-----+
|              8 |
+-----+
1 row in set (0.00 sec)

```