Assignment-4

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**Batch: 2nd 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)