

## **PROGRAM 5**

### **AGGREGATE & STRING FUNCTIONS (EMPLOYEE TABLE):-**

#### **Aggregate Functions**

1. Find the total number of employees working in the company.

```
MariaDB [VARUN_SINGH_2CSE9]> SELECT COUNT(*) AS total_employees FROM employee;
+-----+
| total_employees |
+-----+
|          14 |
+-----+
1 row in set (0.001 sec)
```

2. Calculate the total salary being paid to all employees.

```
MariaDB [VARUN_SINGH_2CSE9]> SELECT SUM(sal) AS total_salary FROM employee;
+-----+
| total_salary |
+-----+
|      31518 |
+-----+
1 row in set (0.001 sec)
```

3. Find the maximum salary from the employee table.

```
MariaDB [VARUN_SINGH_2CSE9]> SELECT MAX(sal) AS max_salary FROM employee;
+-----+
| max_salary |
+-----+
|      5500 |
+-----+
1 row in set (0.001 sec)
```

4. Find the minimum salary from the employee table.

```
MariaDB [VARUN_SINGH_2CSE9]> SELECT MIN(sal) AS min_salary FROM employee;
+-----+
| min_salary |
+-----+
|       880 |
+-----+
1 row in set (0.001 sec)
```

5. Calculate the average salary of employees.

```
MariaDB [VARUN_SINGH_2CSE9]> SELECT AVG(sal) AS avg_salary FROM employee;
+-----+
| avg_salary |
+-----+
|  2251.2857 |
+-----+
1 row in set (0.001 sec)
```

6. Find the maximum salary being paid to clerks.

```
MariaDB [VARUN_SINGH_2CSE9]> SELECT MAX(sal) AS max_clerk_salary FROM employee
    -> WHERE job = 'CLERK';
+-----+
| max_clerk_salary |
+-----+
|        1430 |
+-----+
1 row in set (0.001 sec)
```

7. Find the maximum salary being paid in department number 20.

```
MariaDB [VARUN_SINGH_2CSE9]> SELECT MAX(sal) AS max_dept20_salary FROM employee
    -> WHERE deptno = 20;
+-----+
| max_dept20_salary |
+-----+
|        5500 |
+-----+
1 row in set (0.001 sec)
```

8. Find the minimum salary paid to any salesman.

```
MariaDB [VARUN_SINGH_2CSE9]> SELECT MIN(sal) AS min_salesman_salary FROM employee
-> WHERE job = 'SALESMAN';
+-----+
| min_salesman_salary |
+-----+
|          1250 |
+-----+
1 row in set (0.001 sec)
```

9. Calculate the average salary drawn by managers.

```
MariaDB [VARUN_SINGH_2CSE9]> SELECT AVG(sal) AS avg_manager_salary FROM employee
-> WHERE job = 'MANAGER';
+-----+
| avg_manager_salary |
+-----+
|      3034.3333 |
+-----+
1 row in set (0.001 sec)
```

10. Find the total salary drawn by analysts working in department 40.

```
MariaDB [VARUN_SINGH_2CSE9]> SELECT SUM(sal) AS total_analyst_salary FROM employee
-> WHERE job = 'ANALYST' AND deptno = 40;
+-----+
| total_analyst_salary |
+-----+
|        3300 |
+-----+
1 row in set (0.001 sec)
```

## String Functions

11. Display employee names in uppercase.

```
MariaDB [VARUN_SINGH_2CSE9]> SELECT UPPER(ename)
-> FROM employee;
+-----+
| UPPER(ename) |
+-----+
| SMITH       |
| ALLEN       |
| WARD        |
| JONES        |
| MARTIN      |
| BLAKE        |
| CLARK        |
| SCOTT        |
| KING         |
| TURNER      |
| ADAMS        |
| JAMES        |
| FORD         |
| MILLER      |
+-----+
14 rows in set (0.001 sec)
```

12. Display employee names in lowercase.

```
Mariadb [VARUN_SINGH_2CSE9]> SELECT LOWER(ename) FROM employee;
+-----+
| LOWER(ename) |
+-----+
| smith       |
| allen       |
| ward        |
| jones       |
| martin      |
| blake       |
| clark       |
| scott       |
| king         |
| turner      |
| adams       |
| james       |
| ford         |
| miller      |
+-----+
14 rows in set (0.001 sec)
```

13. Display employee names in proper case (first letter capitalized).

```
MariaDB [VARUN_SINGH_2CSE9]> SELECT CONCAT(
->      UPPER(LEFT(ename,1)),
->      LOWER(SUBSTRING(ename,2))
-> ) AS Proper_Name FROM employee;
+-----+
| Proper_Name |
+-----+
| Smith       |
| Allen       |
| Ward        |
| Jones       |
| Martin      |
| Blake       |
| Clark       |
| Scott       |
| King        |
| Turner      |
| Adams       |
| James       |
| Ford         |
| Miller      |
+-----+
14 rows in set (0.001 sec)
```

14. Display the length of your name.

```
MariaDB [VARUN_SINGH_2CSE9]> SELECT LENGTH('MOHAMMAD TASIN') AS name_length;
+-----+
| name_length |
+-----+
|          14 |
+-----+
1 row in set (0.001 sec)
```

15. Display the length of all employee names.

```
MariaDB [VARUN_SINGH_2CSE9]> SELECT ename, LENGTH(ename) AS name_length FROM employee;
+-----+-----+
| ename | name_length |
+-----+-----+
| SMITH |          5 |
| ALLEN |          5 |
| WARD  |          4 |
| JONES |          5 |
| MARTIN |         6 |
| BLAKE |          5 |
| CLARK |          5 |
| SCOTT |          5 |
| KING  |          4 |
| TURNER |         6 |
| ADAMS |          5 |
| JAMES |          5 |
| FORD  |          4 |
| MILLER |         6 |
+-----+-----+
14 rows in set (0.001 sec)

MariaDB [VARUN_SINGH_2CSE9]>
```