Assignment – 7 (String Functions, Aggregate Functions)

Write SQL queries for the following:

employee_details (id, first_name, last_name, dob, address, email, post, salary)

(id int

dob date

address text

salary decimal)

```
MariaDB [dbms_practice]> CREATE TABLE employee_details (
    ->     id INT PRIMARY KEY,
    ->     first_name VARCHAR(50),
    ->     last_name VARCHAR(50),
    ->     dob DATE,
    ->     address TEXT,
    ->     email VARCHAR(100),
    ->     post VARCHAR(50),
    ->     salary DECIMAL(10, 2)
    -> );
Query OK, 0 rows affected (0.021 sec)
```

1. Select the first three characters of the first_name column from the employee_details

table.

```
MariaDB [dbms_practice]> select substring(first_name, 1,3) as first_three_chars from employee_details;
+-------------------+
| first_three_chars |
+-------------------+
| him               |
| sag               |
+-------------------+
2 rows in set (0.082 sec)
```

2. Find the length of the address column in the employee_details table.

```
MariaDB [dbms_practice]> select length(address)as address_length from employee_details;
+-----------------+
| address_length |
+-----------------+
|              5 |
|              6 |
+-----------------+
2 rows in set (0.079 sec)
```

3. Convert all email addresses in the employee_details table to uppercase.

```
MariaDB [dbms_practice]> select upper(email)as uppercase_email from employee_details;
+-----------------------+
| uppercase_email       |
+-----------------------+
| OLIHIMAL604@GMAIL.COM |
| MOTISAGR@GMAIL.COM    |
+-----------------------+
2 rows in set (0.080 sec)
```

4. Replace the occurrences of "Engineer" with "Eng." in the post column from the employee_details table.

```
MariaDB [dbms_practice]> SELECT REPLACE(post, 'Engineer', 'Eng.') AS updated_post
    -> FROM employee_details;
+--------------+
| updated_post |
+--------------+
| manager      |
| manager      |
+--------------+
2 rows in set (0.003 sec)
```

5. Convert all last_name values in the employee_details table to lowercase.

```
MariaDB [dbms_practice]> select lower(last_name)as lowercase_last_name from employee_details;
+---------------------+
| lowercase_last_name |
+---------------------+
| oli                 |
| rawat               |
+---------------------+
2 rows in set (0.001 sec)
```

6. Find the length of each first_name in the employee_details table.

```
MariaDB [dbms_practice]>  select length(first_name)as first_name_length from employee_details;
+-------------------+
| first_name_length |
+-------------------+
|                 5 |
|                 5 |
+-------------------+
2 rows in set (0.001 sec)
```

7. Concatenate the first_name and last_name columns with a space in between from the

employee_details table.

```
MariaDB [dbms_practice]> SELECT CONCAT(first_name, ' ', last_name) AS full_name
    -> FROM employee_details;
+-------------+
| full_name   |
+-------------+
| himal oli   |
| sagar rawat |
+-------------+
2 rows in set (0.079 sec)
```

8. Convert the address column to uppercase and display the first 10 characters of this uppercase text from the employee_details table.

```
MariaDB [dbms_practice]> SELECT SUBSTRING(UPPER(address), 1, 10) AS address_uppercase_first_10
    -> FROM employee_details;
+---------------------------+
| address_uppercase_first_10 |
+---------------------------+
| ROLPA                     |
| SALYAN                    |
+---------------------------+
2 rows in set (0.001 sec)
```

9. Find the total number of employees in the employee_details table.

```
MariaDB [dbms_practice]> SELECT COUNT(*) AS total_employees
    -> FROM employee_details;
+-----------------+
| total_employees |
+-----------------+
|               2 |
+-----------------+
1 row in set (0.083 sec)
```

10. Calculate the average salary of employees in the employee_details table.

```
MariaDB [dbms_practice]> SELECT AVG(salary) AS average_salary
    -> FROM employee_details;
+----------------+
| average_salary |
+----------------+
| 2000000.000000 |
+----------------+
```

11. Find the highest and lowest salary among employees in the employee_details table.

```
MariaDB [dbms_practice]> SELECT MAX(salary) AS highest_salary, MIN(salary) AS lowest_salary
    -> FROM employee_details;
+---------------+--------------+
| highest_salary | lowest_salary |
+---------------+--------------+
|     2000000.00 |    2000000.00 |
+---------------+--------------+
1 row in set (0.002 sec)
```

12. Calculate the total salary expense (sum of all salary values) for all employees in the employee_details table.

```
MariaDB [dbms_practice]> SELECT SUM(salary) AS total_salary_expense
    -> FROM employee_details;
+----------------------+
| total_salary_expense |
+----------------------+
|           4000000.00 |
+----------------------+
1 row in set (0.000 sec)
```

13. Count the number of distinct job titles (post) in the employee_details table.

```
MariaDB [dbms_practice]> SELECT COUNT(DISTINCT post) AS distinct_job_titles
    -> FROM employee_details;
+--------------------+
| distinct_job_titles |
+--------------------+
|                  1 |
+--------------------+
1 row in set (0.005 sec)
```