WEEK 2

SQL BUILT IN FUNCTIONS

```
mysql> CREATE DATABASE company_ops_db;
Query OK, 1 row affected (0.07 sec)

mysql> USE company_ops_db;
Database changed
mysql> CREATE TABLE user_account (
    ->     user_id INT PRIMARY KEY AUTO_INCREMENT,
    ->     email VARCHAR(100),
    ->     mobile VARCHAR(25),
    ->     phone VARCHAR(25)
    -> );
Query OK, 0 rows affected (0.10 sec)

mysql> CREATE TABLE employee (
    ->     emp_id INT PRIMARY KEY AUTO_INCREMENT,
    ->     emp_name VARCHAR(100),
    ->     department VARCHAR(50),
    ->     joining_date DATE
    -> );
Query OK, 0 rows affected (0.03 sec)

mysql> INSERT INTO user_account (email, mobile, phone) VALUES
    -> ('karthik@gmail.com', '98765 43210', NULL),
    -> ('meena@yahoo.com', NULL, '044-234-5678'),
    -> ('john@outlook.com', NULL, NULL);
Query OK, 3 rows affected (0.03 sec)
Records: 3  Duplicates: 0  Warnings: 0

mysql> INSERT INTO employee (emp_name, department, joining_date) VALUES
    -> ('kaRThik raJa', 'IT', '2020-01-10'),
    -> ('MEENA devi', 'HR', '2018-05-20'),
    -> ('joHN SMith', 'IT', '2022-07-01');
Query OK, 3 rows affected (0.01 sec)
Records: 3  Duplicates: 0  Warnings: 0
```

TASK 1:

```
mysql> SELECT
    ->     email,
    ->     CONCAT(SUBSTRING_INDEX(email, '@', 1), '123') AS default_password
    -> FROM user_account;
+-------------------+------------------+
| email             | default_password |
+-------------------+------------------+
| karthik@gmail.com | karthik123       |
| meena@yahoo.com   | meena123         |
| john@outlook.com  | john123          |
+-------------------+------------------+
3 rows in set (0.03 sec)
```

TASK 2:

```
mysql> SELECT
    ->     email,
    ->     REGEXP_REPLACE(COALESCE(mobile, phone), '[^0-9]', '') AS valid_contact
    -> FROM user_account;
+-------------------+----------------+
| email             | valid_contact  |
+-------------------+----------------+
| karthik@gmail.com | 9876543210     |
| meena@yahoo.com   | 0442345678     |
| john@outlook.com  | NULL           |
+-------------------+----------------+
3 rows in set (0.02 sec)
```

TASK 3:

```
mysql> SELECT
    ->     emp_name,
    ->     CONCAT(
    ->         UPPER(SUBSTRING(emp_name, 1, 1)),
    ->         LOWER(SUBSTRING(emp_name, 2))
    ->     ) AS normalized_name
    -> FROM employee;
+---------------+-----------------+
| emp_name      | normalized_name |
+---------------+-----------------+
| kaRThik raJa  | Karthik raja    |
| MEENA devi    | Meena devi      |
| joHN SMith    | John smith      |
+---------------+-----------------+
3 rows in set (0.02 sec)
```

TASK 4:

```
mysql> SELECT
    ->     email,
    ->     COALESCE(mobile, phone, email) AS preferred_contact
    -> FROM user_account;
+-------------------+-------------------+
| email             | preferred_contact |
+-------------------+-------------------+
| karthik@gmail.com | 98765 43210       |
| meena@yahoo.com   | 044-234-5678      |
| john@outlook.com  | john@outlook.com  |
+-------------------+-------------------+
3 rows in set (0.00 sec)
```

TASK 5:

```
mysql> SELECT
    ->     department,
    ->     AVG(TIMESTAMPDIFF(YEAR, joining_date, CURDATE())) AS avg_experience_years
    -> FROM employee
    -> GROUP BY department;
+------------+----------------------+
| department | avg_experience_years |
+------------+----------------------+
| IT         |               4.5000 |
| HR         |               7.0000 |
+------------+----------------------+
2 rows in set (0.03 sec)

mysql>
```