ASSIGNMENT – 1

STUDENT INFORMATION SYSTEM

J701-Deva R

Tasks 2: Select, Where, Between, AND, LIKE:

1. Write an SQL query to insert a new student into the "Students" table with the following details:

    a. First Name: John

    b. Last Name: Doe

    c. Date of Birth: 1995-08-15

    d. Email: john.doe@example.com

    e. Phone Number: 1234567890

    INSERT INTO Students (first_name, last_name, date_of_birth, email, phone_number)

    -> VALUES ('John', 'Doe', '1995-08-15', 'john.doe@example.com', '1234567890');

Output:

```
mysql> SELECT * FROM Students ;
+------------+------------+-----------+---------------+--------------------------+---------------+
| student_id | first_name | last_name | date_of_birth | email                    | phone_number  |
+------------+------------+-----------+---------------+--------------------------+---------------+
|          1 | Deva       | Ramesh    | 2003-09-29    | deva@gmail.com           | 7305488113    |
|          2 | Deepak     | Raj       | 2003-09-19    | deepak@gmail.com         | 1234567891    |
|          3 | Sri        | Ganesh    | 2004-09-30    | sri@gmail.com            | 1234567892    |
|          4 | Deva       | Balaji    | 2003-06-06    | pavi@gmail.com           | 1234567893    |
|          5 | Pavithra   | Balaji    | 2003-09-29    | pavipb@gmail.com         | 1234567894    |
|          6 | Madhu      | Deva      | 2003-05-26    | madhu@gmail.com          | 1234567895    |
|          7 | Shruthi    | Shanmugam | 2002-09-29    | shruthi@gmail.com        | 1234567896    |
|          8 | Karthick   | Raj       | 2000-02-21    | karthick@gmail.com       | 1234567897    |
|          9 | Ramesh     | Ramesh    | 2002-08-12    | ramesh@gmail.com         | 1234567898    |
|         10 | Madhavan   | Magesh    | 2003-05-06    | madhavan@gmail.com       | 1234567899    |
|         11 | John       | Doe       | 1995-08-15    | john.doe@example.com     | 1234567890    |
+------------+------------+-----------+---------------+--------------------------+---------------+
11 rows in set (0.00 sec)
```

2. Write an SQL query to enroll a student in a course. Choose an existing student and course and insert a record into the "Enrollments" table with the enrollment date.

INSERT INTO Enrollments (student_id, course_id, enrollment_date)

     -> **VALUES(1,5,curdate());**

Output:

```
mysql> SELECT * FROM Enrollments WHERE student_id = 1 AND course_id = 5;
+---------------+------------+-----------+-----------------+
| enrollment_id | student_id | course_id | enrollment_date |
+---------------+------------+-----------+-----------------+
|            11 |          1 |         5 | 2025-03-20      |
+---------------+------------+-----------+-----------------+
1 row in set (0.00 sec)
```

3. Update the email address of a specific teacher in the "Teacher" table. Choose any teacher and modify their email address.

     update teacher set email='nithya@gmail.com' where teacher_id=1;

Output:

```
mysql> select * from teacher where teacher_id=1;
+------------+------------+-----------+-------------------+
| teacher_id | first_name | last_name | email             |
+------------+------------+-----------+-------------------+
|          1 | Dr. Nithya | Brown     | nithya@gmail.com  |
+------------+------------+-----------+-------------------+
1 row in set (0.00 sec)
```

4. Write an SQL query to delete a specific enrollment record from the "Enrollments" table. Select an enrollment record based on the student and course.

```
mysql> SELECT * FROM Enrollments;
+---------------+------------+-----------+-----------------+
| enrollment_id | student_id | course_id | enrollment_date |
+---------------+------------+-----------+-----------------+
|             1 |          1 |         1 | 2024-01-15      |
|             2 |          2 |         2 | 2024-01-16      |
|             3 |          3 |         3 | 2024-01-17      |
|             4 |          4 |         4 | 2024-01-18      |
|             5 |          5 |         5 | 2024-01-19      |
|             6 |          6 |         6 | 2024-01-20      |
|             7 |          7 |         7 | 2024-01-21      |
|             8 |          8 |         8 | 2024-01-22      |
|             9 |          9 |         9 | 2024-01-23      |
|            10 |         10 |        10 | 2024-01-24      |
|            11 |          1 |         5 | 2025-03-20      |
+---------------+------------+-----------+-----------------+
11 rows in set (0.00 sec)
```

DELETE FROM Enrollments WHERE student_id = 1 AND course_id = 5;

Output:

```
mysql> SELECT * FROM Enrollments;
+---------------+------------+-----------+-----------------+
| enrollment_id | student_id | course_id | enrollment_date |
+---------------+------------+-----------+-----------------+
|             1 |          1 |         1 | 2024-01-15      |
|             2 |          2 |         2 | 2024-01-16      |
|             3 |          3 |         3 | 2024-01-17      |
|             4 |          4 |         4 | 2024-01-18      |
|             5 |          5 |         5 | 2024-01-19      |
|             6 |          6 |         6 | 2024-01-20      |
|             7 |          7 |         7 | 2024-01-21      |
|             8 |          8 |         8 | 2024-01-22      |
|             9 |          9 |         9 | 2024-01-23      |
|            10 |         10 |        10 | 2024-01-24      |
+---------------+------------+-----------+-----------------+
10 rows in set (0.00 sec)
```

5. Update the "Courses" table to assign a specific teacher to a course. Choose any course and teacher from the respective tables.

```
mysql> SELECT * FROM courses;
+-----------+---------------------+---------+------------+
| course_id | course_name         | credits | teacher_id |
+-----------+---------------------+---------+------------+
|         1 | Mathematics         |       3 |          1 |
|         2 | Physics             |       4 |          2 |
|         3 | Chemistry           |       3 |          3 |
|         4 | Biology             |       4 |          4 |
|         5 | Computer Science    |       3 |          5 |
|         6 | History             |       2 |          6 |
|         7 | Economics           |       3 |          7 |
|         8 | English Literature  |       3 |          8 |
|         9 | Psychology          |       3 |          9 |
|        10 | Business Management |       4 |         10 |
+-----------+---------------------+---------+------------+
10 rows in set (0.00 sec)
```

Update courses set teacher_id=3 where course_id=8;

Output:

```
mysql> select * from courses where course_id=8;
+-----------+--------------------+---------+------------+
| course_id | course_name        | credits | teacher_id |
+-----------+--------------------+---------+------------+
|         8 | English Literature |       3 |          3 |
+-----------+--------------------+---------+------------+
1 row in set (0.00 sec)
```

6. Delete a specific student from the "Students" table and remove all their enrollment records from the "Enrollments" table. Be sure to maintain referential integrity.

```
mysql> SELECT * FROM Enrollments WHERE student_id = 5;
+---------------+------------+-----------+-----------------+
| enrollment_id | student_id | course_id | enrollment_date |
+---------------+------------+-----------+-----------------+
|             5 |          5 |         5 | 2024-01-19      |
+---------------+------------+-----------+-----------------+
1 row in set (0.00 sec)
```

DELETE FROM Students WHERE student_id = 5;

Output:

```
mysql> SELECT * FROM Students WHERE student_id = 5;
Empty set (0.00 sec)

mysql> SELECT * FROM Enrollments WHERE student_id = 5;
Empty set (0.00 sec)
```

7. Update the payment amount for a specific payment record in the "Payments" table. Choose any payment record and modify the payment amount.

update payments set amount=50000 where payment_id=3;

Output:

```
mysql> SELECT * FROM Payments WHERE student_id = 3;
+------------+------------+----------+--------------+
| payment_id | student_id | amount   | payment_date |
+------------+------------+----------+--------------+
|          3 |          3 | 50000.00 | 2024-02-03   |
+------------+------------+----------+--------------+
1 row in set (0.00 sec)
```