SLIIT UNI
THE KNOWLEDGE UNIVERSITY

Faculty of Computing

Year 2 Semester 1 (2025)

IT2140- Database Design and Development   Lab Sheet 03

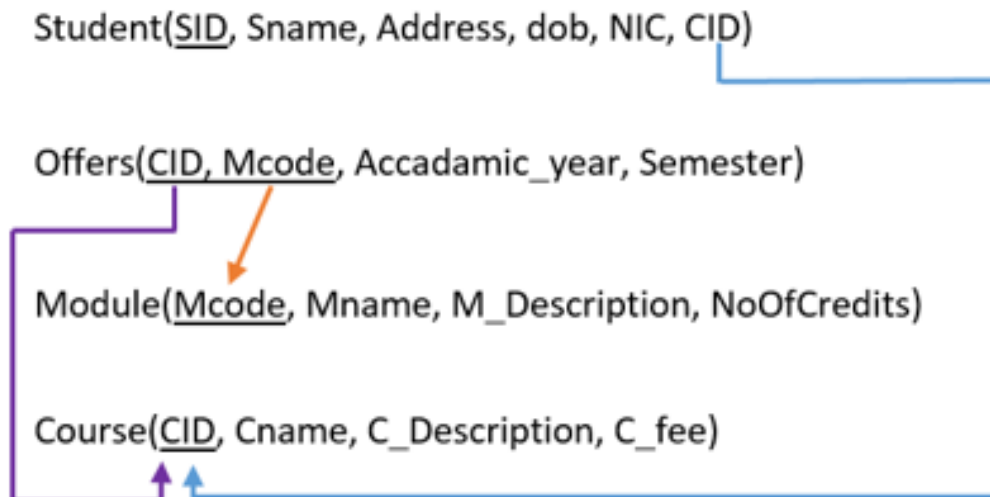**Lab Sheet 03: Creating Tables with Constraints in SQL**

> **Objective**
>
> At the end of this lab session, you will be able to use the CREATE TABLE command to create database tables and specify Primary Key, Foreign Key, and Check constraints on the tables created.

Practical Exercises

You are given the following schema representing a university database.

1. Identify the Primary Keys and Foreign Keys for each table.

2. Determine the correct order to create the tables to avoid foreign key constraint errors.

3. Using ALTER TABLE, add the following CHECK constraints:

   - In the Student table, the NIC number must be exactly 9 digits followed by 'V' or 'v'.
   - In the Module table, the credits value must be 1, 2, 3, or 4.

Student(<u>SID</u>, Sname, Address, dob, NIC, CID)

Offers(<u>CID, Mcode</u>, Accadamic_year, Semester)

Module(<u>Mcode</u>, Mname, M_Description, NoOfCredits)

Course(<u>CID</u>, Cname, C_Description, C_fee)

Submission Requirement:

Complete **Create table script** of this lab sheet and upload your SQL query answers to the **Git repository** provided by your instructor **before end of the day**.

File Naming Guidelines:

- Name your submission file as:
  Lab_3_CreateDB.sql

Additional Instructions:

- Ensure your SQL queries are well-formatted and include comments where necessary.

- Test your queries before uploading to confirm they run without errors.

- Commit and push your file to the correct Git repository and branch as instructed.