School: SCHOOL OF ENGINEERING & TECHNOLOGY Campus: PARLAKHEMUNDI

Academic Year: 2025-26 Subject Name: RELATIONAL & DISTRIBUTED DATABASES Subject Code: CUCS 1005

Semester: 4th Program: B.TECH Branch: CSE Specialization:

Date:

Applied and Action Learning

(Learning by Doing and Discovery)

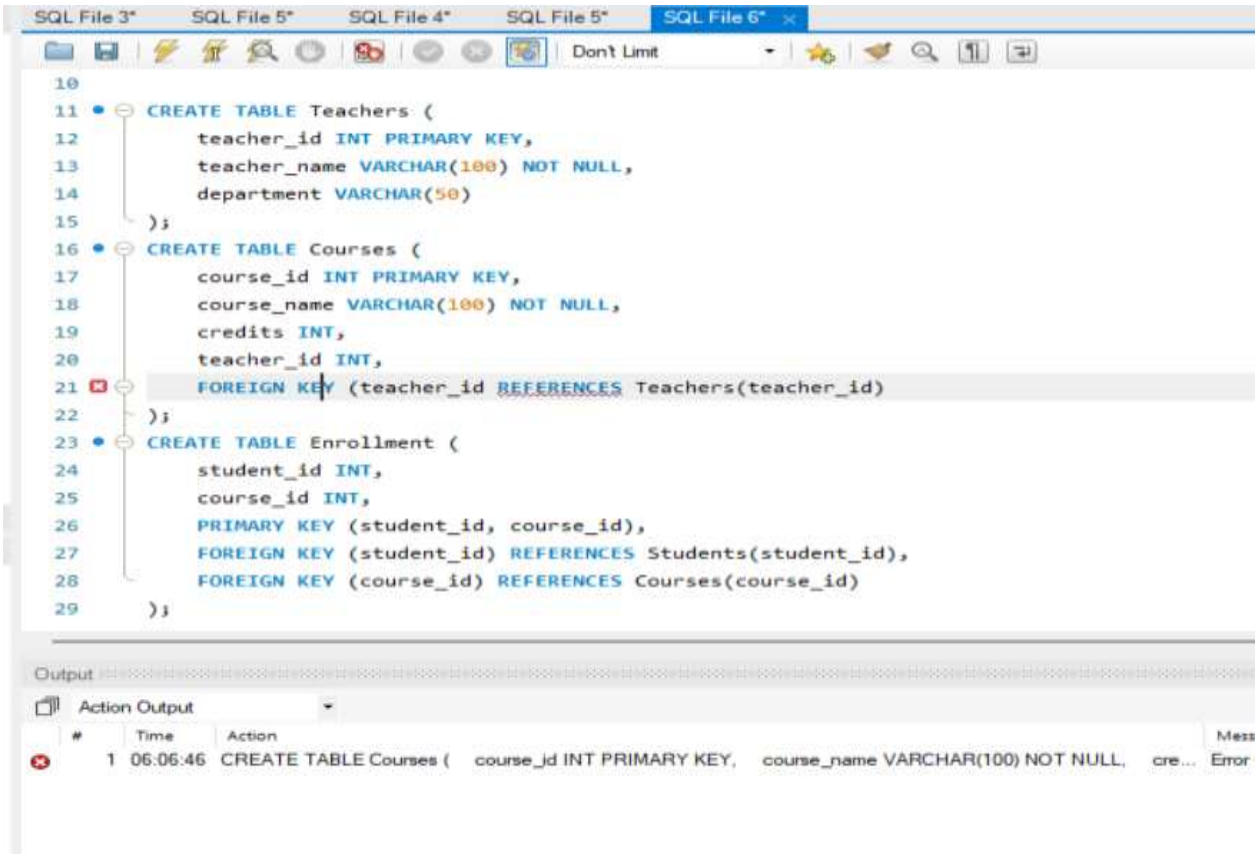
Name of the Experiement : Creating ER Diagrams

Coding Phase: Pseudo Code / Flow Chart / Algorithm

1. Execute the SQL programs and create database and tables:
- UniversityDB
- Students
- Teachers
- Courses
- Enrollment

2. From the top menu, click
   Database → Reverse Engineer
3. Click Next
4. Choose the active connection
5. Select the schema UniversityDB
6. Click Next → Next → Execute
7. Click Finish

Testing Phase : Compilation of Code (error detection)



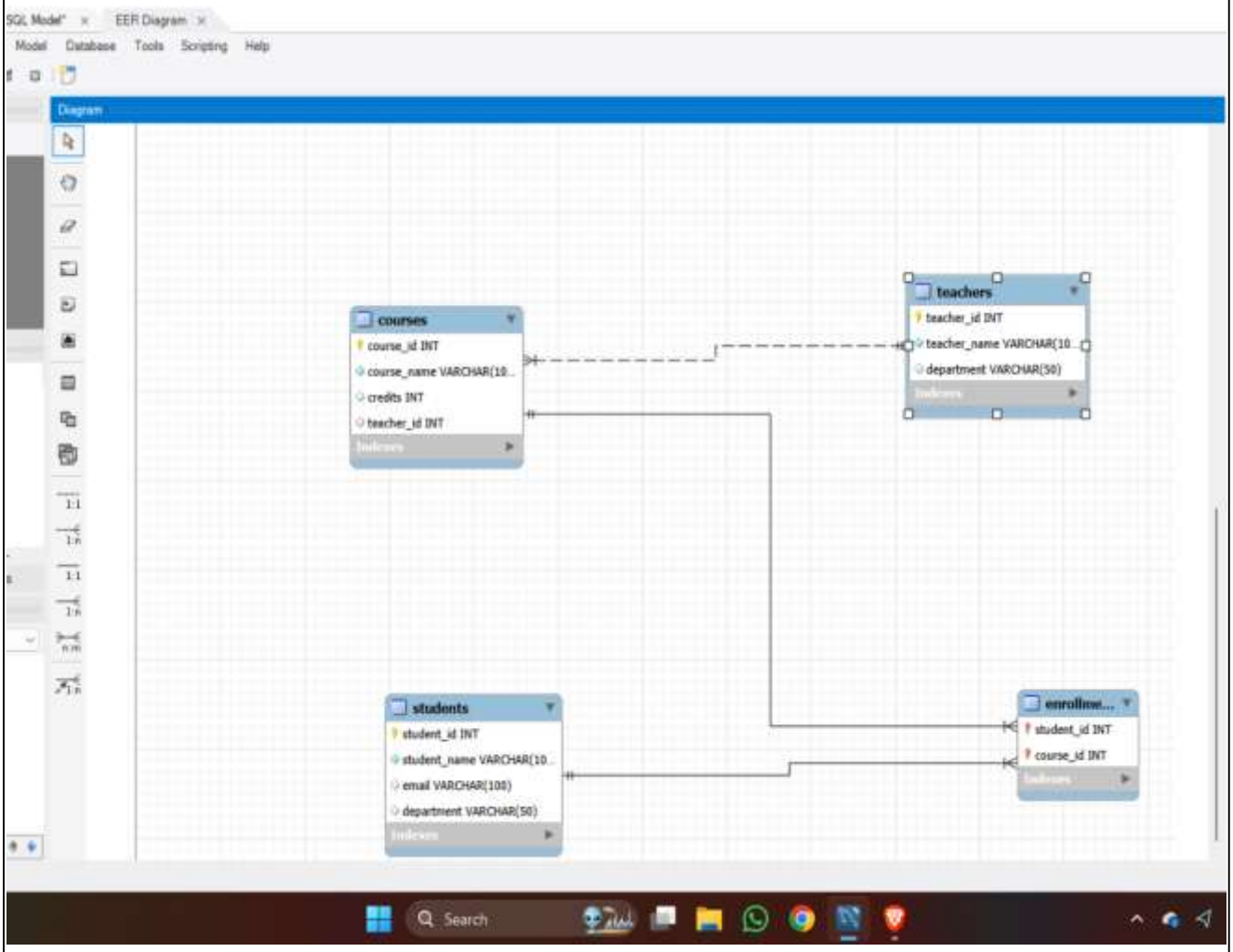
Implementation Phase: Final Output (no error)

```
CREATE DATABASE UniversityDB;
USE UniversityDB;

CREATE TABLE Students (
    student_id INT PRIMARY KEY,
    student_name VARCHAR(100) NOT NULL,
    email VARCHAR(100) UNIQUE,
    department VARCHAR(50)
);

CREATE TABLE Teachers (
    teacher_id INT PRIMARY KEY,
    teacher_name VARCHAR(100) NOT NULL,
    department VARCHAR(50)
);
CREATE TABLE Courses (
    course_id INT PRIMARY KEY,
    course_name VARCHAR(100) NOT NULL,
    credits INT,
    teacher_id INT,
    FOREIGN KEY (teacher_id) REFERENCES Teachers(teacher_id)
);
CREATE TABLE Enrollment (
    student_id INT,
    course_id INT,
    PRIMARY KEY (student_id, course_id),
    FOREIGN KEY (student_id) REFERENCES Students(student_id),
    FOREIGN KEY (course_id) REFERENCES Courses(course_id)
);
```

ER DIAGRAM:



ASSESSMENT

Rubrics	Full Mark	Marks Obtained	Remarks
Concept	10		
Planning and Execution/ Practical Simulation/ Programming	10		
Result and Interpretation	10		
Record of Applied and Action Learning	10		
Viva	10		
Total	**50**		

Signature of the Student:

Name :

Regn. No. :

Signature of the Faculty: