### **Database Query Translation Assignment**

**Objective:** Translate the provided queries from PowerPoint slides into SQL and explain each query in your own words.

#### Instructions:

### 1. Database Setup:

• Create a new database named "UniversityDB" in Microsoft SQL Server.

#### 2. Table Creation:

• Create the tables based on the provided schema for student, course, and StudentCourse.

#### 3. Data Insertion:

• Insert at least 5 records into the **Student** table, 3 records into the **Course** table, and create relationships in the **StudentCourse** table to represent students taking various courses.

### 4. Query Translation:

• Translate each query from the PowerPoint slides into SQL. Use the actual data you inserted in step 3 for testing.

## 5. Explanation:

• For each translated query, provide a brief explanation in your own words. Explain what the query is trying to achieve and how it works.

### 6. **Testing:**

 Execute each SQL query and verify the results. Ensure that the output aligns with the expected results.

## **Example Query:**

# **PowerPoint Slide Query:**

SELECT FirstName, LastName FROM Student WHERE Gender = 'M';

#### **Explanation:**

• This query retrieves the first and last names of male students from the student table. It uses a SELECT statement to specify the columns to be retrieved and a WHERE clause to filter the results based on the gender being 'M' (male).

# Note:

- Include the SQL scripts, explanations, and any screenshots of query results in your submission.
- Verify the correctness of your SQL syntax and the accuracy of the query results.