

Luanne Plemmons
Dr. Vudumu
ENCE 420 – T01
September 26, 2025

ENCE 420 Coding Assignment 3 MySQL Database

INPUT:

Terminal instructions to run the file: *SchoolDB_example_for_testing.sql*

```
PS C:\Users\Luanne's ENGR Dell\OneDrive - Anderson University\Documents\Documents - Copy\ENCE 420 - SE Networking\CodingAssignment3> mysql -u root -p
Enter password: *****
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 16
Server version: 9.4.0 MySQL Community Server - GPL

Copyright (c) 2000, 2025, Oracle and/or its affiliates.

mysql> SOURCE C:\Users\Luanne's ENGR Dell\OneDrive - Anderson University\Documents\Documents - Copy\ENCE 420 - SE Networking\CodingAssignment3\SchoolDB_example_for_testing.sql
```

OUTPUT:

Part 1: Database and Basic Queries

Query to print all students:

student_id	name	age	major
1	Luanne Plemmons	21	Computer Engineering
2	Lizzie Long	21	Computer Engineering
3	Michael Dye	21	Computer Engineering
4	Mikayla Hubbard	21	Coding and App Development
5	Jane Doe	20	Electrical Engineering
6	John Doe	18	Forensics Engineering

Query to print all courses:

course_id	course_name	credits
101	ENCE 410 VLSI Design	3
102	Calculus II	4
103	ENCE 420 Software Engineering	3

Query to print only students older than 21:

student_id	name	age	major
1	Luanne Plemmons	21	Computer Engineering
2	Lizzie Long	21	Computer Engineering
3	Michael Dye	21	Computer Engineering
4	Mikayla Hubbard	21	Coding and App Development

Print only courses over 3 credits:

course_id	course_name	credits
102	Calculus II	4

Part 2: Relationships with Keys

Query to list all students with the courses they are enrolled in:

student_name	course_name	grade
Luanne Plemmons	ENCE 410 VLSI Design	A
Lizzie Long	ENCE 410 VLSI Design	A
Michael Dye	Calculus II	A
Jane Doe	Calculus II	B
John Doe	Calculus II	D
Mikayla Hubbard	ENCE 420 Software Engineering	A

Query to show all students who got grade 'A' in any course:

student_name	course_name
Luanne Plemmons	ENCE 410 VLSI Design
Lizzie Long	ENCE 410 VLSI Design
Michael Dye	Calculus II
Mikayla Hubbard	ENCE 420 Software Engineering

Query to count how many students are enrolled in each course:

course_name	total_students
ENCE 410 VLSI Design	2
Calculus II	3
ENCE 420 Software Engineering	1

Part 3: Python + MySQL Integration

Terminal commands to run file: app.py

```
PS C:\Users\Luanne's ENGR Dell\OneDrive - Anderson University\Documents\Documents - Copy\ENCE 420 - SE Networking\CodingAssignment3> python app.py
```

```
===== Student-Course Management System =====
```

1. Add Student
2. Add Course
3. Enroll Student in Course
4. Show Student's Enrollments
5. Exit

Enter your choice:

Enter your choice: 1

Enter student name: Luanne Plemmons

Enter student age: 21

Enter student major: Computer Engineering

Student 'Luanne Plemmons' added with ID 1

Enter your choice: 2

Enter course name: ENCE 420 Software Engineering

Enter course credits: 4

Course 'ENCE 420 Software Engineering' added with ID 101

Enter your choice: 4

Enter student ID: 1

```
--- Enrollments ---
```

Student: Luanne | Course: ENCE 420 Software Engineering | Grade: A