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\Docume nts\Documents - Copy\ENCE 420 - SE Networking\CodingAssignment3\SchoolDB_exampl e_for_testing.sql

OUTPUT:

Part 1: Database and Basic Queries

Query to print all students:

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

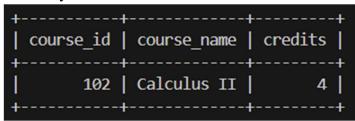
Query to print all courses:

+			
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:



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	Α
Lizzie Long	ENCE 410 VLSI Design	Α
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:

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

+	++
course_name	total_students
+	H+
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
```