

CS 1104

Database Assignment 1

Assignment Date: 14/11/24
Due Date: 19/11/24 (Moelim)

Student Database Schema:

- **Students:** Student_ID (PK), First_Name, Last_Name, Email, Phone
- **Courses:** Course_ID (PK), Course_Name, Instructor_ID (FK)
- **Instructors:** Instructor_ID (PK), Instructor_Name, Email
- **Enrollments:** Enrollment_ID (PK), Student_ID (FK), Course_ID (FK), Enrollment_Date, Grade
- **Departments:** Department_ID (PK), Department_Name, Department_Head
- **Student_Department:** Student_ID (FK), Department_ID (FK)

Q1: Find the names of all students who are enrolled in the course titled "Introduction to Computer Science".

Q2: Find the names of all instructors who teach a course titled "Data Structures".

Q3: Find all students along with the courses they are enrolled in.

- **Tables to join:** Students, Enrollments, and Courses

Q4: Find the average grade for each student in the course titled "Calculus I".

- **Tables to join:** Students, Enrollments, and Courses

Q5: Find the names of all students who belong to the "Computer Science" department.

- **Tables to join:** Students and Student_Department

Q6: List all courses along with their instructors' names.

- **Tables to join:** Courses and Instructors

Q7: Find all students who have received an 'A' grade in the course titled "Data Structures".

- **Tables to join:** Figure out yourself

Q8: Find the total number of students enrolled in each course.

- **Tables to join:** Figure out yourself

Q9: List all students and their respective department names.

- **Tables to join:** Figure out yourself

Q10: Find all instructors who teach courses in the "Engineering" department.

- **Tables to join:** Figure out yourself

A word of caution:

- **Your assignment must be your own work. Do not ask someone else to help you or to do the assignment for you. If you are having trouble, please see the instructor and I will be glad to help.**
- **If you copy someone else's code or let someone else copy your code, you will both receive a zero for this assignment and could receive an F for the course.**