

Lab 3

CS301/AI301

August 11, 2025

Academic System Schema

- Student (StudentID, name, dept_name)
- Takes (StudentID, Course_id, Section_id, semester, year, grade)
- Course (CourseID, title, dept_name, credits)
- Section (Course_id, Section_id, semester, year, classroom)
- Teaches (Ins_id, Course_id, Section_id, semester, year)
- Department (dept_name)
- Instructor (InsID, dept_name)

Questions

- Q1. Find course titles taken by students in the 'CSE' department.
- Q2. Get the names of all instructors who have taught a course in the 'EE' department.
- Q3. Find the names of all students who haven't taken any course.
- Q4. List all course titles and the number of students enrolled in each course.
- Q5. Find the names of instructors who do not teach any courses.
- Q6. For each department, list the department name and the number of courses it offers.
- Q7. List the titles of courses that have never been taught (i.e., not in any section).
- Q8. Find the names of students who have taken courses outside their department.
- Q9. Count the number of instructors in each department.
- Q10. List titles of courses with more than 3 credits.
- Q11. Find the names of students and the total number of courses each has taken.
- Q12. List the classroom(s) and the number of different courses scheduled there.