

CS301/AI301

Lab Assignment

August 18, 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)

- Q1. Find students who have taken all courses in their department.
Q2. Find the course(s) with the highest enrollment.
Q3. Find instructors who taught only students from their own department.
Q4. Find students who scored the highest grade in at least one course.
Q5. Find course titles taught by every instructor in the CSE department.
Q6. Find students who never scored below the average grade of their department.
Q7. Find classrooms where exactly one unique course was scheduled.
Q8. List students who have taken a course that no one else has taken.
Q9. Find instructors who taught in the same classroom across different semesters.
Q10. Find course titles taken by students in the 'CSE' department.