

## CS241 - Questions for Lab Assignment 2

### 1 INSTRUCTIONS

- (1) This lab is graded.
- (2) Those of you who have not completed the previous lab must complete it first.

### 2 QUESTIONS

Consider the following relations:

Student(snum: integer, sname: string, major: string, level: string, age: integer)

Class(name: string, meets\_at: time, room: string, fid: integer)

Enrolled(snum: integer, cname: string)

Faculty (fid: integer, fname: string, deptid: integer)

The meaning of these relations is straightforward; for example, Enrolled has one record per student-class pair such that the student is enrolled in the class.

- (1) Create each of the above relations in SQL and create relation instances with the values given [5].
- (2) Write each of the queries given to you in Lab 1 in SQL. [ 5 Marks]

**If you have already done the above two in the previous lab, you must answer the next set of queries.**

**Otherwise they are not compulsory.**

- (3) Write the following queries in SQL. No duplicates should be printed in any of the answers. [2 Marks each]
  - (a) Find all classes conducted in room "R128".
  - (b) Find all the faculty members who use room "R128". (List their ids, names and department ids).
  - (c) Find the name of the faculty member who teaches "Data Structures".
  - (d) Find the courses that Joseph Thompson has enrolled in.
  - (e) Find the names of students who have taken at least one course.