## CS241 - Questions for Lab Assignment 5

## 1 INSTRUCTIONS

- This lab is graded. Each question carries 2 marks. Maximum marks: 14
- Store answers for all questions in a single text file.
- Create the following relations:

Student(<u>snum: integer primary key</u>, sname: varchar(40), major: varchar(40), level: varchar(40), age: integer)

Faculty (fid: integer primary key, fname: varchar(40), deptid: integer)

Class(<u>name</u>: <u>varchar(40)</u> <u>primary key</u>, meets\_at: varchar(40), room: varchar(40), fid: integer references faculty)

Enrolled(snum: integer references student, cname: varchar(40) references Class(name))

• There are 4 text files attached in the mail. Insert data from these text files into the corresponding created tables of previous question.

## 2 QUESTIONS

- (1) Find the name and age of the youngest student who is either a English major or enrolled in a course taught by Ivana Teach.
- (2) Find the names of all classes that either meet in room R128 or have less than 3 students enrolled.
- (3) For each age value that appears in Students, find the standing value that appears most often. For example, if there are more FR standing students aged 18 than SR, JR, or SO students aged 18, you should print the pair (18, FR).
- (4) Find the names of faculties who have taught courses whose course names start with 'O' and were conducted in room R15 and for which at least one student has enrolled.
- (5) Find the students of standing SR who have enrolled in some course which is conducted in room R15.
- (6) Find the course names for which no student has enrolled and whose name starts with either 'O' or 'A' but always ends with 's'.
- (7) List all faculty members, showing their id, name and the number of classes they teach. The number of classes of those who teach no classes must be shown as 0.