## Lab 3

The relations for this assignment are in a database called **CollMgmtSys**, and have the following schemas:

Student (Snum, Name, Major, Level, Age) - Snum is primary key

Class (Name, Time, Room, Fid)

Enrolled (Snum, ClassName)

Faculty (Fid, Name, Dept) - Fid is primary key

The keys are in italics. The meaning of these relations is straightforward; for example, Enrolled has one record per student-class pair such that student is enrolled in class. They were created using the following SQL statements:

CREATE TABLE Student (Snum int, Name char(10), Major char(10), Level char(2), Age int );

## For primary key:

CREATE TABLE student (Snum int primary key, Name char(10), Major char(10), Level char(2), Age int);

## Insert following information:

Snum	Name	Major	Level	Age
101	Susan Gurung	Software	Bachelor	24
102	Sam KC	Computer	Bachelor	23
103	Hari Rai	Electronics	Masters	25
104	Gopal Shrestha	Software	Bachelor	26

Table 1 Student table

Name	Time	Room	Fid
C++	M9-10	R3	F501
MATHS	M8-9	R4	F505
C++	E5-6	R7	F501
PHYSICS	E5-6	R6	F508

Table 2 Class table

Snum	Classname
101	C++
102	C++
103	PHYSICS
104	MATHS

Table 3 Enrolled table

Fid	Name	Dept
F501	B.Shrestha	Computer
F505	R.Thapa	Maths
F508	S.Tamrakar	Computer
F509	P.Acharya	Science

Table 4 Faculty table

Using this database **CollMgmtSys**, write the following queries in SQL. No duplicates should be printed in any of the answers.

- 1. Find the names of all Software Majors (Major = "Software").
- 2. Retrieve the list of names, age and major of all the students.
- 3. Find the names of all Software Majors (Major = "Software") who are aged more than 25.
- 4. Find all the students whose name start with 'S'.
- 5. Find the names of all faculties having 'T' as the initial of the surnames.
- 6. List all the subject names and the room they are taught in at 5-6 of Evening time.
- Display all the faculty information sorted in an ascending order based on Department and sort by Fid when repetition occurs.
- 8. Find the names of all classes that either meet in room R3 or are taught by "B.Shrestha". (hard-coded)
- 9. Find the names of all students who are enrolled in some class together (C++).
- 10. Find the names of faculty members who are from Computer department.
- 11. Find the names as well as department name of faculty members who teaches at 5-6 of Evening time.
- 12. Display the average age of students as 'Average Age' of Bachelors level.
- 13. Find the Classname in which Sam KC is enrolled in.
- 14. Find the names of all students who are not enrolled in any class taught by "BShrestha".
- 15. Change the timing of C++ class of Room 3 to morning 7-8.
- 16. Display all students name studying either of Software or Computer as Major.
- 17. Delete all the students who is older than 25 years of age.