

## 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.
7. 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.