1. What is a database? Explain briefly
2. Give example situations in which databases are used.
3. What is a database management system (DBMS)?
4. Give example DBMS available
5. Consider the following database schema and write the following queries in SQL.

**Employee (eid, name, salary, dept, address)**

**Department (deptNo, name, building)**

a. Print names of all employees

b. Print names of all departments and the building name in which they are located

c. Print names of employees **working** for “Administration” (i.e. dname) department

e. Print names of all employees and assigned department’s name.

f. Print department name and number of employees in each department.

g. Print department name and number of employees only if the number of employees is greater than 10.

1. Consider the following University database schema.

**Student(student\_id, student\_name, address, Tutor)**

**Enrollment(student\_id, subject\_id, mark)**

**Subject(subject\_id, subject\_name, department)**

Write the following queries in SQL for the University database given above.

(a) Display a list of all students in an alphabetic order.

(b) Display a list of all departments that offer subjects.

(c) Display a list of names of all subjects offered by the Department of Computer Science.

(d) Find the names of students that have not been assigned a tutor.

(e) Find the student id's of students that have a mark for CS1500.

(f) Print list of student id’s of students enrolled in MA1100.

(g) List student names who are following course CS1500.

(h) List all students id’s of the Department of Computer Science.

(i) List all student names and student ids of the students who have passed (marks > 45) the MA1100.

\*End of the Tutorial\*