Lab 1

**Subject Area Analysis (University database)**

1. The DB is designed to hold information relating to/ about university.
2. 7 entities:

Student (stud\_id, last\_name,first\_name,phone,birth\_place,date\_of\_birth,student\_GPA);

Advisor (ad\_id,last\_name,first\_name,phone,Group\_of\_advising,work\_stage);

Group (group\_id, group\_name, amount\_of\_students, group\_activity);

Faculty (fac\_id,fac\_name,fac\_priority,fac\_leader,fac\_location);

Subject (sub\_id, sub\_name,sub\_credits,sub\_teachers,sub\_students);

Teacher (teacher\_id, teacher\_name,teacher\_subject,salary,stage);

1. One student can be in only one Group and has only one Advisor and Faculty but many Subjects.

One Advisor can advise several Groups and have many Students under his advising.

One Group can have many Students and one Advisor and many Subjects and Teachers.

One Faculty can have many Students and many Subjects and many Teachers.

One Subject can have many Students and many Teachers.

One Teacher can have many Students and many Subjects but only one Faculty.

1. Student`s date of birth must be later than 1990.

Student`s GPA in 1/2/3/4 year must be greater than 1.7/2/2.5/3

Student`s level of English in 1/2/3/4 year must be Elementary/Pre-Inter/Intermediate/Upper-Inter

1. The Database is designed for University workers who has access to personal data of Students/Teachers and University.
2. Find Student by his first name.

Sort Groups by amount\_of\_students.

Find Advisors by their work\_stage.

Sort Teachers by their salary.

Find Faculty by it`s fac\_location.

Find Subject by it`s credits.

Find Advisor by his Group\_of\_advising.

Sort Students by their id.

Find Subject by it`s sub\_id.