Name: Zijie Yu
Course: CSC-434 Database management
Date: 03/23/2019

I'm going to make college database. The sample entities should be: Student, Instructor, Non-instructorEmoloyee, Department, Library, Classroom, Manager, Tuition, Course, Program, registration.

Sample SQL queries on my database:

Make student table:

```sql
use college;
create table student
(
  Student_ID    int,
  Student_name varchar(20),
  Department    varchar(20),
  Grade         varchar(20),
  Program       varchar(20),
  YearEnrolled int
);
```

Find student whose name is jack:

```sql
select Student_name from student
where Student_name = "Jack";
```

Create program table:

```sql
create table program (
  Name varchar(20),
  CreditPoints int,
  YearCommand int,
  Student_Name varchar(20)
)
```

See Jack if he enrolled IAP program:

```sql
select Student_name from student, program
where student.Student_name = program.Student_name
and Student_name = "Jack"
and name = "IAP";
```

Sample triggers for my database:

I'm going to create trigger called Student_log, once the registration table update (include add), the trigger will add information such as "Student_name has been added in system in xxx(time)".

Also, I'm going to create "Enforcing Referential Integrity" trigger, if student hasn't been added in registration, and they can't be added in any other table.

Summary trigger is also important for college database. I'm going to create trigger that will record and calculate student's GPA, such as max max(gpa) and min(gpa).

Lastly, the system log is also needed. Once the user add invalid record, the trigger should add: xxx user add invalid record in xxx (time).

What has been done:

I have already decided what database I should write and what entities should be included.

What need to be done:

I should think about each entities' fields and the relationship with other entities.

I also need to think about the cardinality for each entity.