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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:

*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:

*select* Student\_name *from* student  
*where* Student\_name = "Jack";

Create program table:

*create table* program (  
 *Name varchar*(20),  
 CreditPoints *int*,  
 YearCommand *int*,  
 Student\_Name *varchar*(20)   
)

See Jack if he enrolled IAP program:

*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.