

1:

Design extensions to the ProgressTracker database so that it becomes possible to register students and they can choose a track(within a division).

2:

Create a trigger for the insert operation on the table Restrictors. The trigger prevents the case of the courseNumber and restrictorID being the same(a course cannot be a restrictor on it self). If this is the case then the trigger prevents the insert by throwing an error and writes an error message.

Example of an insert operation that the trigger stops:

```
insert into Restrictors values('GSF2B3U','GSF2B3U',1);
```

3:

Write an identical trigger for the update operation on the table Restrictors

4:

Write a stored procedure that sums up the course credits that a student has finished arranged by the divisions offering these courses.

#### NOTE

The general courses(physics, mathematics, sociology, etc.) actually belong to the General Study Division(Tæknimenntaskólinn NTT13). This in fact means that if the student has completed four, three credit courses of general studies(say math and physics) and five, three credit courses at the computer division(Tölvubraut TBR16) the results would look something like this:

NTT13	12
TBR16	15

Only courses that are graded  $\geq 5$  or are graded 'passed' should be chosen.

5:

Write a cursor that selects all the mandatory courses for a student and puts them into the table that stores the student courses.

Put this cursor in a stored procedure that can be called "AddMandatoryCourses" and is run when a student selects courses for the first time. The selection process could be implemented in another stored procedure, perhaps called NewStudentCourses.

In that one a check is performed to see if the student has chosen courses before and if that is then the AddMandatoryCourses has already been run and is NOT run again.