CS 1555/2055: Database Management Systems Department of Computer Science, University of Pittsburgh

Triggers

Setup

You will need to run triggers_setup.sql to set up the following tables:

```
create table students (
    id integer primary key,
    name varchar(24)
);

create table courses (
    num varchar(6) primary key,
    open boolean not null,
    enrolled integer default 0,
    lim integer default 3
);

create table enrollment (
    student integer references students(id),
    course varchar(6) references courses(num)
);
```

Write triggers to address the following:

60 points Create a trigger the will update the enrolled attribute of a course every time a new row is added to the enrollments table for that course. Further, this trigger should set the open attribute of that record to in the courses table false if the row added to the enrollments table would cause the number of enrolled students to hit the enrollment limit (set in the lim attribute). You do not need to consider updates or deletes for this assignment.

40 points Write a trigger that will block an addition to the enrollments table for any course that is full (i.e., open is false). Again, you do not need to consider updates or deletes for this assignment.

What to submit

In a **single** typed SQL file, please submit your answers to all questions. Name the file in following way: hw#-<your_username> (where # is the number of the assignment). **No hand-written assignments** are accepted. Any hand-written and scanned assignment will not be graded.

Submit your assignment by the due date. There is no late submission.