



3. Assume the tables of Question 2 have been created by executing the statements there. Provide SQL statements to declare the following constraints.
- (a) No nulls are permitted, except possibly in the year column of the Students table.
  - (b) The primary keys of the three tables are, respectively, `sid`, `(dept, num, sec)`, and `(sid, dept, num, sec)`.
  - (c) The only permissible values for `year` are 1, 2, 3, 4, g, and n.
  - (d) The credits column must contain only nonnegative integers no greater than 10.
  - (e) Every student ID value in the Enrolls table also occurs in the Students table and, similarly, every `(dept, num, sec)` triple in Enrolls also occurs in the Courses table, and every TA value in Enrolls also occurs as `sid` in Students.

[additional space for answering the earlier question]

4. Add to the developing schema of Questions 2 and 3 a SQL statement that declares the constraint “a student who is enrolled in a class is not permitted to serve as TA of that class.”

5. Suppose the database system being used does not permit the SQL statement of Question 4, but supports SQL triggers. Provide a SQL trigger to enforce the constraint of Question 4.