**Exercise:**

Keeping in view the current issues of neon, we are required to redesign the neon system, in which we are keeping track of student and their departments. Along with that we need to maintain the enrollment i.e., a student is enrolled in a particular section of a course. So also need to keep track of all the courses offered by the university along with the respective sections. Students will enroll in sections of a particular course.

Follow the schema specified in **lab.txt** file. Create a database with given information. Insert some rows in each table and do the below questions.

1. The academic officer is concerned with database auditing so he decides to maintain a record of changes made to database. Create a table **Auditing** in database with a column **audit\_id** and **Last\_change\_on**. Create triggers on student, department and faculty tables so that whenever any change is made on these tables the dates of change get stored in the Auditing table.
2. Though academic officer was pretty much satisfied with your last change but after few months it feels something is missing in auditing table so you are asked to change the structure of the audit table. So now you also have to store the description of changes i.e., which table from the above-mentioned tables was changed. So, make appropriate change in triggers to perform the operation.
3. Now focusing more on the registration system, we firstly need to have some sort of security. So, in order to have some level of abstraction in our course and section tables we need to design a view, so that when students query for enrollment i.e., applying for the registration of a particular section you should be displaying data from that view rather applying queries on multiple tables (course and section).
4. Moreover, we need to have a store procedure of the above functionality in order to reduce the network traffic and faster execution.
5. The academic officer also wants to make sure no one insert, update or deletes department information from the database. As university has only 3 departments CS, EE and MG and that are already present in database. So, create a trigger that will not let anyone to change the department table.
6. You don’t have a persistent and secure backup of your database schema so you can’t simply allow any body to change the data definition of any of the table, i.e., ALTER and DROP a table is not allowed. So, you have to make a DDL Trigger in order to achieve this task.