**/\*Part 1\*/**

/\*Add chair column into course\*/

Alter table course

ADD chair varchar (50) not null; # Full name of dept chair

DELETE FROM COURSE;

/\*Will have the chair name since we put a trigger\*/

insert into course (departmentName, courseName, courseNumber, description, units)

values ('Computer Engineering Computer Science', 'The Digital Information Age',

202, 'The introduction and use of common-place digital and

electronic devices and how this technology affects our society.

Topics include advances in 3D imaging, 3D printing,

Processors, Memory, Security and Privacy.', 3),

('Computer Engineering Computer Science', 'Database Fundamentals',

323, 'Fundamental topics on database management. Topics include

entity-relationship models, database design, data definition

language, the relational model, data manipulation language,

database application programming and normalization.', 3),

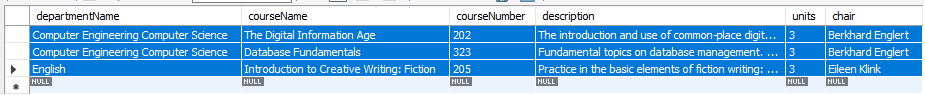
('English', 'Introduction to Creative Writing: Fiction',

205, 'Practice in the basic elements of fiction writing: character

sketch, plot development, description, and dialog.', 3);

SELECT \*FROM COURSE;

**OUTPUT:**

****

/\*Test to alter the chair name in course. Expected result: should fail since we put a trigger to prevent changing chair name from course\*/

update course

set chair='Mehrdad Aliasgari'

where departmentName = 'Computer Engineering Computer Science';

**OUTPUT:**

|  |  |  |  |
| --- | --- | --- | --- |
| 21:22:40 | update course set chair='Mehrdad Aliasgari' where departmentName = 'Computer Engineering Computer Science' | Error Code: 1644. CANNOT CHANGE CHAIR IN COURSE TABLE | 0.000 sec |

**/\*Part 2\*/**

create table deptCourse (

college varchar (50) not null,

deptname varchar (50) not null, # unique name of the department

chair varchar (50) not null, # Full name of dept chair

officeBldg varchar (10) not null, # varchar(3) might be enough

officeNo integer not null,

courseName varchar(50) not null,

courseNumber integer not null,

description varchar(2000) not null, # Never put this into the key

units int not null,

constraint deptCourse\_pk primary key (deptName, courseNumber), #primary key

constraint deptCourse\_ck unique (deptName, courseName) #candidate key

);

INSERT INTO deptCourse(college,deptname,chair,officeBldg,officeNo,courseName,courseNumber,description,units)

VALUES ('Engineering', 'Computer Engineering Computer Science', 'Mehrdad Aliasgari', 'ECS', 542,'Database Fundamentals',

323, 'Fundamental topics on database management. Topics include

entity-relationship models, database design, data definition

language, the relational model, data manipulation language,

database application programming and normalization.', 3);

SELECT \* FROM deptCourse;

/\*Suppose to get error since the chair name is different from what already existed\*/

INSERT INTO deptCourse(college,deptname,chair,officeBldg,officeNo,courseName,courseNumber,description,units)

VALUES ('Engineering', 'Computer Engineering Computer Science', 'GG', 'ECS', 542,'Computer Structure',

325, 'structure of computer', 3);

**OUTPUT:**

|  |  |  |  |
| --- | --- | --- | --- |
| 21:24:46 | INSERT INTO deptCourse(college,deptname,chair,officeBldg,officeNo,courseName,courseNumber,description,units) VALUES ('Engineering', 'Computer Engineering Computer Science', 'GG', 'ECS', 542,'Computer Structure', 325, 'structure of computer', 3) | Error Code: 1644. THE INSERT INFORMATION WAS NOT CORRECT | 0.000 sec |

/\*Suppose to be successfully inserted\*/

INSERT INTO deptCourse(college,deptname,chair,officeBldg,officeNo,courseName,courseNumber,description,units)

VALUES ('Engineering', 'Computer Engineering Computer Science', 'Mehrdad Aliasgari', 'ECS', 542,'Computer Structure',

325, 'structure of computer', 3);

/\*Suppose to get error since we put a trigger to prevent us from modifying the departmental information\*/

update deptCourse

set chair='GG'

where deptname = 'Computer Engineering Computer Science';

**OUTPUT:**

|  |  |  |  |
| --- | --- | --- | --- |
| 21:25:36 | update deptCourse set chair='GG' where deptname = 'Computer Engineering Computer Science' | Error Code: 1644. CANNOT CHANGE DEPARTMENTAL INFORMATION | 0.000 sec |