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BIFX 530

Homework 3

9/22/2022

**Consider the ER diagram for a student organizations database. Convert the ER diagram to relational schema, then convert the relation schema to SQL statements.**

Student(student\_id, student\_name, email\_address)

Faculty\_advisor(faculty\_id, faculty\_name, phone\_numer, email\_address)

Organization(name, description, type, faculty\_id)

Event(name, event\_name, date, description, location, student\_id)

Student\_major(student\_id, major)

Member\_of(student\_id, name, date)

Drop table if exists Student\_major;

Drop table if exists Member\_of;

Drop table if exists Event;

Drop table if exists Organization;

Drop table if exists Faculty\_advisor;

Drop table if exists Student;

create table Student(

student\_id int(10),

student\_name varchar(50),

email\_address varchar(50),

primary key(student\_id));

create table Faculty\_advisor(

faculty\_id int(10),

faculty\_name varchar(50),

phone\_number int(10),

email\_address varchar(50),

primary key(faculty\_id));

create table Organization(

name varchar(50),

description varchar(500),

type varchar(10),

faculty\_id int(10) NOT NULL,

primary key(name),

foreign key(faculty\_id) references Faculty\_advisor(faculty\_id));

create table Event(

name varchar(50) NOT NULL,

event\_name varchar(50),

date date,

description varchar(500),

location varchar(50),

student\_id int(10),

primary key(name, event\_name, date),

foreign key(student\_id) references Student(student\_id),

foreign key(name) references Organization(name) ON DELETE CASCADE);

create table Student\_major(

student\_id int(10),

major varchar(50),

primary key(student\_id, major),

foreign key(student\_id) references Students(student\_id));

create table Member\_of(

student\_id int(10),

name varchar(50),

date date,

primary key(student\_id, name),

foreign key(student\_id) references Student(student\_id),

foreign key(name) references Organization(name));