**Lab 2**

**Relationsmodell**

T\_User(userID, username, password, socialSecNo)

T\_Author(authorID, fName, lName, dateOfBirth, createdBy)

T\_Book(bookID, isbn, title, published, storyLine, createdBy)

T\_BookGenre(bookID, genre)

T\_Review (userID, BookID, date, description, rating)

T\_Write(authorID, bookID)

T\_Author.createdBy *references* T\_User.userID  
T\_Book.createdBy *references* T\_User.userID

T\_Review.userID *references* T\_User.userID

T\_BookGenre.userID *references* T\_User.userID  
T\_Review.userID *references* T\_Book.userID  
T\_Review.bookID *references* T\_Book.bookID  
T\_Write.authorID *references* T\_Author.authorID  
T\_Write.bookID *references* T\_Book.bookID

**SQL-kommandon**

Skapa databas  
CREATE DATABASE db\_books;

Skapa tabeller

CREATE TABLE T\_User(  
 userID INT AUTOINCREMENT PRIMARY KEY,  
 username VARCHAR(20) NOT NULL,  
 password VARCHAR(20) NOT NULL,

socialSecNo VARCHAR(12) NOT NULL

UNIQUE(username, socialSecNo)  
);  
CREATE TABLE T\_Author (  
 authorID INT AUTOINCREMENT PRIMARY KEY,  
 fName VARCHAR(20) NOT NULL,

lName VARCHAR(20) NOT NULL,

datOfBirth DATE NOT NULL,

createdBy INT NOT NULL,

CONSTRAINT INT createdBy\_fk FOREIGN KEY (createdBy)

REFERENCES T\_User(userID) ON DELETE SET NULL  
);  
CREATE TABLE T\_Book (  
 bookIDINT AUTOINCREMENT PRIMARY KEY,  
 isbn VARCHAR(20) NOT NULL,

title VARCHAR(20) NOT NULL,

createdBy INT NOT NULL,

UNIQUE(isbn),  
 CONSTRAINT INT createdBy\_fk FOREIGN KEY (createdBy)

REFERENCES T\_User(userID) ON DELETE SET NULL  
);

CREATE TABLE T\_BookGenre(  
 bookID INT PRIMARY KEY,  
 genre ENUM(‘ROMANCE’, ‘DRAMA’, ‘COMEDY’, ‘HORROR’),

CONSTRAINT bookGenre\_fk FOREIGN KEY (bookID) REFERENCES T\_Book(bookID) ON DELETE CASCADE

);  
  
CREATE TABLE T\_Review (  
 userID INT PRIMARY KEY,

bookID INT PRIMARY KEY,

date DATE NOT NULL,  
 description TEXT,  
 rating INT,

CONSTRAINT review\_fk1 FOREIGN KEY (userID) REFERENCES T\_User(userID) ON DELETE CASCADE  
CONSTRAINT review\_fk2 FOREIGN KEY (bookID) REFERENCES T\_Book(bookID) ON DELETE CASCADE

);

CREATE TABLE T\_Write(  
 bookID INT PRIMARY KEY,  
 authorID INT PRIMARY KEY,

CONSTRAINT write\_fk1 FOREIGN KEY (bookID) REFERENCES T\_BOOK(bookID) ON DELETE CASCADE

CONSTRAINT write\_fk2 FOREIGN KEY (authorID) REFERENCES T\_Author(authorID) ON DELETE CASCADE

);