

CSC 2212 (Database Systems)

Fall 2024

Final Exam – Part B

Liza Nikitsenka

1.

```
ynikitsenka@spock:~$ cd csc2212
ynikitsenka@spock:~/csc2212$ ls
Ch01-DB-Systems-3  Ch03-Relational-DB-Model  Ch07-Intro-to-SQL
ynikitsenka@spock:~/csc2212$ cd Ch07-Intro-to-SQL
ynikitsenka@spock:~/csc2212/Ch07-Intro-to-SQL$ ls
Ch07_ConstructCo.mdb      Ch07_Fact_SQL.sql          Ch07_SaleCo_ORA.sql
Ch07_ConstructCo_MySQL.sql  Ch07_LargeCo.mdb          Ch07_SaleCo_SQL.sql
Ch07_ConstructCo_ORA.sql   Ch07_LargeCo_MySQL.sql    mysaleco.db
Ch07_ConstructCo_SQL.sql   Ch07_LargeCo_ORA.sql      mytest.db
Ch07_Fact.mdb             Ch07_LargeCo_SQL.sql      'not used'
Ch07_Fact_MySQL.sql        Ch07_SaleCo.accdb
Ch07_Fact_ORA.sql          Ch07_SaleCo_MySQL.sql
ynikitsenka@spock:~/csc2212/Ch07-Intro-to-SQL$ vi Ch07_Fact_MySQL.sql
ynikitsenka@spock:~/csc2212/Ch07-Intro-to-SQL$ sqlite3 Exam.db < Ch07_Fact_MySQL.sql
Parse error near line 3: near "DATABASE": syntax error
  DROP DATABASE IF EXISTS CH07_FACT;
  ^--- error here
Parse error near line 5: near "DATABASE": syntax error
  CREATE DATABASE CH07_FACT;
  ^--- error here
Parse error near line 7: near "USE": syntax error
  USE CH07_FACT;
  ^--- error here
ynikitsenka@spock:~/csc2212/Ch07-Intro-to-SQL$ vi Ch07_Fact_MySQL.sql
ynikitsenka@spock:~/csc2212/Ch07-Intro-to-SQL$ rm Exam.db
ynikitsenka@spock:~/csc2212/Ch07-Intro-to-SQL$ sqlite3 Exam.db < Ch07_Fact_MySQL.sql
ynikitsenka@spock:~/csc2212/Ch07-Intro-to-SQL$ sqlite3 Exam.db
SQLite version 3.41.2 2023-03-22 11:56:21
Enter ".help" for usage hints.
sqlite> .schema
CREATE TABLE AUTHOR (
  AU_ID      NUMERIC(7,0) PRIMARY KEY,
  AU_FNAME   VARCHAR(30) NOT NULL ,
  AU_LNAME   VARCHAR(30) NOT NULL ,
  AU_BIRTHYEAR NUMERIC(4)
);
CREATE TABLE PATRON (
  PAT_ID     NUMERIC(10,0) PRIMARY KEY,
  PAT_FNAME  VARCHAR(20) NOT NULL ,
  PAT_LNAME  VARCHAR(20) NOT NULL ,
  PAT_TYPE   VARCHAR(10) NOT NULL
);
CREATE TABLE BOOK (
  BOOK_NUM   NUMERIC(10,0) PRIMARY KEY,
  BOOK_TITLE VARCHAR(120) NOT NULL ,
  BOOK_YEAR  NUMERIC(4)
,
  BOOK_COST  NUMERIC(8,2)
,
);
CREATE TABLE BOOK (
  BOOK_NUM   NUMERIC(10,0) PRIMARY KEY,
  BOOK_TITLE VARCHAR(120) NOT NULL ,
  BOOK_YEAR  NUMERIC(4)
,
  BOOK_COST  NUMERIC(8,2)
,
  BOOK_SUBJECT VARCHAR(120)
,
  PAT_ID     NUMERIC(10),
  FOREIGN KEY(PAT_ID) REFERENCES PATRON(PAT_ID)
);
CREATE TABLE CHECKOUT (
  CHECK_NUM   NUMERIC(15) PRIMARY KEY,
  BOOK_NUM    NUMERIC(10),
  PAT_ID      NUMERIC(10),
  CHECK_OUT_DATE DATE,
  CHECK_DUE_DATE DATE,
  CHECK_IN_DATE DATE,
  FOREIGN KEY (BOOK_NUM) REFERENCES BOOK(BOOK_NUM),
  FOREIGN KEY (PAT_ID) REFERENCES PATRON(PAT_ID)
);
CREATE TABLE WRITES (
  BOOK_NUM   NUMERIC(10),
  AU_ID      NUMERIC(7),
  CONSTRAINT WRITES_BOOK_AU_PK PRIMARY KEY (BOOK_NUM, AU_ID),
  CONSTRAINT WRITES_BOOK_NUM_FK FOREIGN KEY(BOOK_NUM) REFERENCES BOOK(BOOK_NUM),
  CONSTRAINT WRITES_AU_ID_FK FOREIGN KEY(AU_ID) REFERENCES AUTHOR(AU_ID)
);
sqlite> █
```