CREATE TABLE BookEdition (

ISBN TEXT PRIMARY KEY

NOT NULL

UNIQUE

CHECK (length(ISBN) = 5),

title TEXT,

author TEXT NOT NULL,

publicationDate INTEGER NOT NULL,

genre TEXT NOT NULL

CONSTRAINT Valid\_Checkdigit CHECK (SUBSTR(CAST (ISBN AS INT), 5, 1) = SUBSTR(3 \* (SUBSTR(CAST (ISBN AS INT), 1, 1) + SUBSTR(CAST (ISBN AS INT), 3, 1) ) + 7 \* (SUBSTR(CAST (ISBN AS INT), 2, 1) + SUBSTR(CAST (ISBN AS INT), 4, 1) ), -1) )

);

CREATE TABLE BookCopy (

ISBN TEXT

NOT NULL,

copyNumber INTEGER NOT NULL,

daysLoaned INTEGER,

CONSTRAINT fk FOREIGN KEY (ISBN) REFERENCES BookEdition (ISBN),

CONSTRAINT pk PRIMARY KEY (ISBN,copyNumber)

);

CREATE TABLE loan (

clientId INT,

ISBN TEXT

NOT NULL,

copyNumber INTEGER NOT NULL,

dateOut TEXT NOT NULL,

dateBack TEXT,

FOREIGN KEY (clientId) REFERENCES Client (clientId) ON DELETE SET NULL,

FOREIGN KEY (ISBN,copyNumber) REFERENCES BookCopy (ISBN,copyNumber)

);

CREATE TABLE Client (

clientId INTEGER PRIMARY KEY

UNIQUE

NOT NULL,

name TEXT NOT NULL,

residence TEXT NOT NULL

);

CREATE VIEW ReadingHistory as SELECT b.clientId,b.y AS yr,a.genre,COUNT(a.genre) AS numLoans FROM BookEdition AS a JOIN

(SELECT clientId,loan.ISBN,STRFTIME('%Y',dateOut) AS y,loan.copyNumber FROM loan JOIN BookCopy

ON loan.ISBN=BookCopy.ISBN AND loan.copyNumber=BookCopy.copyNumber) AS b ON a.ISBN=b.ISBN GROUP BY genre,clientId,y;