fname
dname
ename
Faculty
Donor
Editor
1
1
M
borrowed
donated
edited_by
N
N
N
N
aname
room
location
1
N
contains
Book
N
written
_by
M
Author
shelf
N
Additional
notes
year
title
edition
copy
category
availability
published
_by
M
Publisher
pname

CREATE TABLE Book (
    title VARCHAR(250),
    edition VARCHAR(250),
    copy INTEGER,
    year VARCHAR(250),
    category VARCHAR(250),
    availability VARCHAR(250),
    additional_notes VARCHAR(250),
    room VARCHAR(250) NOT NULL,
    shelf VARCHAR(250) NOT NULL,
    pname VARCHAR(250) NOT NULL,
    fname VARCHAR(250),
    dname VARCHAR(250),
    PRIMARY KEY (title, edition, copy),
    FOREIGN KEY (room, shelf) REFERENCES Location ON DELETE NO ACTION,
    FOREIGN KEY (pname) REFERENCES Publisher ON DELETE NO ACTION,
    FOREIGN KEY (fname) REFERENCES Faculty,
    FOREIGN KEY (dname) REFERENCES Donor
);

```
--------------------------------------------------------------------------------
CREATE TABLE Author(
        aname  VARCHAR(250),
        PRIMARY KEY      (aname));
--------------------------------------------------------------------------------
CREATE TABLE Faculty(
        fname  VARCHAR(250),
        PRIMARY KEY      (fname));
--------------------------------------------------------------------------------
CREATE TABLE Donor(
        dname VARCHAR(250),
        PRIMARY KEY      (dname);
)
--------------------------------------------------------------------------------
CREATE TABLE Editor(
        ename  VARCHAR(250),
        PRIMARY KEY      (ename);
)
--------------------------------------------------------------------------------
CREATE TABLE Publisher(
        pname VARCHAR(250),
        PRIMARY KEY      (pname));
--------------------------------------------------------------------------------
CREATE TABLE Location(
        room   VARCHAR(250),
        shelf   VARCHAR(250),
        PRIMARY KEY      (room, shelf));
--------------------------------------------------------------------------------
CREATE TABLE written_by(
        aname  VARCHAR(250),
        title    VARCHAR(250),
        edition VARCHAR(250),
        copy    INTEGER,
        PRIMARY KEY          (aname, title, edition, copy),
        FOREIGN KEY          (aname) REFERENCES Author,
        FOREIGN KEY          (title, edition, copy) REFERENCES Book
        );
--------------------------------------------------------------------------------
```

```
CREATE TABLE edited_by(
      ename  VARCHAR(250),
      title     VARCHAR(250),
      edition VARCHAR(250),
      copy    INTEGER,
      PRIMARY KEY        (ename, title, edition, copy),
      FOREIGN KEY        (ename) REFERENCES Editor,
      FOREIGN KEY        (title, edition, copy) REFERENCES Book
      );
```