LIBRARY:-

```sql
CREATE TABLE PUBLISHER (
NAME VARCHAR (18) PRIMARY KEY,

ADDRESS VARCHAR (10),

PHONE VARCHAR (10));


CREATE TABLE BOOK (

BOOK_ID INTEGER PRIMARY KEY,

 TITLE VARCHAR (20),

PUBLISHER_NAME VARCHAR (20),

FOREIGN KEY(PUBLISHER_NAME) REFERENCES PUBLISHER(NAME) ON DELETE CASCADE,

PUB_YEAR INT (4));


CREATE TABLE BOOK_AUTHORS (

BOOK_ID INTEGER, AUTHOR_NAME VARCHAR (20),

 Foreign key(BOOK_ID) REFERENCES BOOK(BOOK_ID) ON DELETE CASCADE,

PRIMARY KEY(BOOK_ID));


CREATE TABLE LIBRARY_BRANCH(

 BRANCH_ID INTEGER PRIMARY KEY,

 BRANCH_NAME VARCHAR(18),

ADDRESS VARCHAR(15));


CREATE TABLE BOOK_COPIES (

BOOK_ID INTEGER,BRANCH_ID INTEGER,

NO_OF_COPIES INTEGER,

FOREIGN KEY(BOOK_ID) REFERENCES BOOK(BOOK_ID) ON DELETE CASCADE,
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        FOREIGN KEY(BRANCH_ID) REFERENCES LIBRARY_BRANCH(BRANCH_ID)
        ON DELETE CASCADE,

        PRIMARY KEY (BOOK_ID, BRANCH_ID));



CREATE TABLE BOOK_LENDING (

        BOOK_ID INTEGER,BRANCH_ID INTEGER,

        CARD_NO
        INTEGER,

        DATE_OUT DATE,

        DUE_DATE DATE,

        FOREIGN KEY(BOOK_ID) REFERENCES BOOK(BOOK_ID) ON DELETE
        CASCADE,

        FOREIGN KEY(BRANCH_ID) REFERENCES LIBRARY_BRANCH(BRANCH_ID)
        ON DELETE CASCADE,

        PRIMARY KEY (BOOK_ID, BRANCH_ID, CARD_NO));


INSERT INTO PUBLISHER VALUES('PEARSON','BANGALORE','899123409');

 INSERT INTO PUBLISHER VALUES('MCGRAW','MUMBAI','9579118877');

INSERT INTO PUBLISHER VALUES('SCHAND','BANGALORE','8291661199');



INSERT INTO BOOK VALUES(1111,'SE','PEARSON',2005);

INSERT INTO BOOK VALUES(2222,'DBMS','MCGRAW',2004);

 INSERT INTO BOOK VALUES(3333,'CN','PEARSON',2010);

 INSERT INTO BOOK VALUES(4444,'WEB','SCHAND',2010);



INSERT INTO BOOK_AUTHORS VALUES(1111,'SHYAM'),(2222,'NAVEEN'), (3333,RSAGRAWAL'),
(4444,'TRIPURA');
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INSERT INTO LIBRARY_BRANCH VALUES (11,'ZOOLOGICAL','MANASA'),(22,'MEDICAL','BETLA'), (33,'CHILDREN','SOLAN'),(44,'SECRETRIAT','CHURCH RD'),(55, 'GENERAL','VIJAYNAGAR');

INSERT INTO BOOK_COPIES VALUES (1111,11,10),(3333,22,16),(4444,33,12),(2222,11,18), (4444,55,30);

INSERT INTO BOOK_LENDING VALUES (2222,11,1, '2022-01-17','2022-08-27'),(3333,22,2, '2022-07-19','2022-08-13'),(4444,55,1, '2022-04-12','2022-09-17'),(2222,11,5, '2022-08-09','2022-08-19'), (4444,33,1, '2022-06-18','2022-08-16'),(1111,11,1, '2022-05-12','2022-06-10'),(3333,22,1, '2022-07-17','2022-07-22');

Query 1:

SELECT LB. BRANCH_NAME, B. BOOK_ID, TITLE, PUBLISHER_NAME, AUTHOR_NAME, NO_OF_COPIES **FROM** BOOK B, BOOK_AUTHORS BA, BOOK_COPIES BC, LIBRARY_BRANCH LB **WHERE** B. BOOK_ID = BA. BOOK_ID AND BA. BOOK_ID = BC. BOOK_ID AND BC. BRANCH_ID = LB. BRANCH_ID **GROUP BY** LB. BRANCH_NAME, B. BOOK_ID, TITLE, PUBLISHER_NAME, AUTHOR_NAME, NO_OF_COPIES;

Query2:

SELECT CARD_NO FROM BOOK_LENDING WHERE DATE_OUT BETWEEN '2022-1-1' AND '2022-10-1'GROUP BY CARD_NO HAVING COUNT(*)>=1;

QUERY 3:

DELETE FROM BOOK **WHERE** BOOK_ID = '3333';

QUERY 4:

CREATE VIEW V_PUBLICATION AS SELECT BOOK_ID, TITLE, PUBLISHER_NAME,   PUB_YEAR FROM BOOK ORDER BY PUB_YEAR;

Query 5:

CREATE VIEW BOOKS_AVAILABLE **AS SELECT** B. BOOK_ID, B. TITLE,C.NO_OF_COPIES **FROM** LIBRARY_BRANCH L, BOOK B, BOOK_COPIES C **WHERE** B. BOOK_ID = C. BOOK_ID AND L. BRANCH_ID=C.BRANCH_ID;