CREATE TABLE PUBLISHER (PUB\_ID VARCHAR (20), NAME VARCHAR (20), ADDRESS VARCHAR (50), PHONE BIGINT, PRIMARY KEY(PUB\_ID));

CREATE TABLE BOOK (BOOK\_ID VARCHAR (20), TITLE VARCHAR (20), PUBLISHER\_NAME VARCHAR (20), PUB\_YEAR INT, PRIMARY KEY(BOOK\_ID));

CREATE TABLE BOOK\_AUTHORS (BOOK\_ID VARCHAR (20), AUTHOR\_NAME VARCHAR (20), PRIMARY KEY (BOOK\_ID, AUTHOR\_NAME), FOREIGN KEY (BOOK\_ID) REFERENCES BOOK (BOOK\_ID) ON DELETE CASCADE ON UPDATE CASCADE);

CREATE TABLE LIBRARY\_BRANCH (BRANCH\_ID VARCHAR (20), BRANCH\_NAME VARCHAR (20), ADDRESS VARCHAR (60), PRIMARY KEY (BRANCH\_ID));

CREATE TABLE BOOK\_COPIES (BOOK\_ID VARCHAR (20), BRANCH\_ID VARCHAR (20), NO\_OF\_COPIES INT, PRIMARY KEY (BOOK\_ID, BRANCH\_ID), FOREIGN KEY(BOOK\_ID) REFERENCES BOOK (BOOK\_ID) ON DELETE CASCADE ON UPDATE CASCADE, FOREIGN KEY (BRANCH\_ID) REFERENCES LIBRARY\_BRANCH (BRANCH\_ID) ON DELETE CASCADE ON UPDATE CASCADE);

CREATE TABLE BOOK\_LENDING (BOOK\_ID VARCHAR (20), BRANCH\_ID VARCHAR (20), CARD\_NO INT, DATE\_OUT DATE, DUE\_DATE DATE, PRIMARY KEY (BOOK\_ID, BRANCH\_ID, CARD\_NO), FOREIGN KEY (BOOK\_ID) REFERENCES BOOK (BOOK\_ID) ON DELETE CASCADE ON UPDATE CASCADE, FOREIGN KEY (BRANCH\_ID) REFERENCES LIBRARY\_BRANCH (BRANCH\_ID) ON DELETE CASCADE ON UPDATE CASCADE);

INSERT INTO BOOK VALUES ('B1', 'BOOK1', 'PUB1', 2016);

INSERT INTO BOOK VALUES ('B2', 'BOOK2', 'PUB2', 2017);

INSERT INTO BOOK VALUES ('B3', 'BOOK3', 'PUB2', 2016);

INSERT INTO BOOK VALUES ('B4', 'BOOK4', 'PUB1', 2016);

INSERT INTO BOOK VALUES ('B5', 'BOOK5', 'PUB1', 2017);

INSERT INTO PUBLISHER VALUES ('P1', 'PUB1', 'BENGALURU', 1234567890);

INSERT INTO PUBLISHER VALUES ('P2', 'PUB2', 'CHENNAI', 1234567891);

INSERT INTO BOOK\_AUTHORS VALUES ('B1', 'SAKSHATH');

INSERT INTO BOOK\_AUTHORS VALUES ('B3', 'PRADEEP');

INSERT INTO BOOK\_AUTHORS VALUES ('B3', 'PRADEEP');

INSERT INTO BOOK\_AUTHORS VALUES ('B4', 'SACHETH');

INSERT INTO BOOK\_AUTHORS VALUES ('B5', 'SAKSHATH');

INSERT INTO LIBRARY\_BRANCH VALUES ('L1', 'LIB1', 'BENGALURU');

INSERT INTO LIBRARY\_BRANCH VALUES ('L2', 'LIB2', 'BENGALURU');

INSERT INTO LIBRARY\_BRANCH VALUES ('L3', 'LIB3', 'MANGALURU');

INSERT INTO LIBRARY\_BRANCH VALUES ('L4', 'LIB4', 'UDUPI');

INSERT INTO LIBRARY\_BRANCH VALUES ('L5', 'LIB5', 'MANGALURU');

INSERT INTO BOOK\_COPIES VALUES ('B1', 'L1', 12);

INSERT INTO BOOK\_COPIES VALUES ('B3', 'L1', 6);

INSERT INTO BOOK\_COPIES VALUES ('B4', 'L1', 15);

INSERT INTO BOOK\_COPIES VALUES ('B2', 'L2', 11);

INSERT INTO BOOK\_COPIES VALUES ('B3', 'L2', 17);

INSERT INTO BOOK\_COPIES VALUES ('B5', 'L2', 15);

INSERT INTO BOOK\_COPIES VALUES ('B1', 'L3', 15);

INSERT INTO BOOK\_COPIES VALUES ('B2', 'L3', 13);

INSERT INTO BOOK\_COPIES VALUES ('B5', 'L3', 17);

INSERT INTO BOOK\_COPIES VALUES ('B4', 'L4', 9);

INSERT INTO BOOK\_COPIES VALUES ('B3', 'L4', 18);

INSERT INTO BOOK\_COPIES VALUES ('B2', 'L4', 18);

INSERT INTO BOOK\_COPIES VALUES ('B1', 'L4', 7);

INSERT INTO BOOK\_COPIES VALUES ('B1', 'L5', 10);

INSERT INTO BOOK\_COPIES VALUES ('B2', 'L5', 10);

INSERT INTO BOOK\_COPIES VALUES ('B3', 'L5', 10);

INSERT INTO BOOK\_COPIES VALUES ('B4', 'L5', 10);

INSERT INTO BOOK\_COPIES VALUES ('B5', 'L5', 10);

INSERT INTO BOOK\_LENDING VALUES ('B1', 'L1', 225, '2019-2-25', '2019-3-25');

INSERT INTO BOOK\_LENDING VALUES ('B3', 'L1', 225, '2019-2-22', '2019-3-22');

INSERT INTO BOOK\_LENDING VALUES ('B4', 'L1', 225, '2019-3-22', '2019-4-22');

INSERT INTO BOOK\_LENDING VALUES ('B2', 'L2', 225, '2019-4-13', '2019-5-13');

INSERT INTO BOOK\_LENDING VALUES ('B5', 'L3', 222, '2019-4-13', '2019-5-13');

INSERT INTO BOOK\_LENDING VALUES ('B1', 'L3', 222, '2019-1-15', '2019-2-15');

SELECT B.BOOK\_ID, B.TITLE, B.PUBLISHER\_NAME, A.AUTHOR\_NAME, C.NO\_OF\_COPIES,

L.BRANCH\_ID

FROM BOOK B, BOOK\_AUTHORS A, BOOK\_COPIES C, LIBRARY\_BRANCH L

WHERE B.BOOK\_ID = A.BOOK\_ID

AND B.BOOK\_ID = C.BOOK\_ID

AND L.BRANCH\_ID = C.BRANCH\_ID;

SELECT CARD\_NO

FROM BOOK\_LENDING

WHERE DATE\_OUT BETWEEN '2019-1-1' AND '2019-6-30'

GROUP BY CARD\_NO

HAVING COUNT(\*)>3;

CREATE VIEW P\_YEAR AS

SELECT PUB\_YEAR

FROM BOOK;

SELECT \* FROM P\_YEAR;

CREATE VIEW V\_BOOKS AS

SELECT B.BOOK\_ID, B.TITLE, C.NO\_OF\_COPIES

FROM BOOK B, BOOK\_COPIES C

WHERE B.BOOK\_ID = C.BOOK\_ID;

DELETE FROM BOOK WHERE BOOK\_ID = 'B5';