CREATE TABLE PUBLISHER (NAME VARCHAR2 (20) PRIMARY KEY, PHONE INTEGER, ADDRESS VARCHAR2 (20));

INSERT INTO PUBLISHER VALUES ('MCGRAW-HILL', 9989076587, 'BANGALORE');

INSERT INTO PUBLISHER VALUES ('PEARSON', 9889076565, 'NEWDELHI');

INSERT INTO PUBLISHER VALUES ('RANDOM HOUSE', 7455679345, 'HYDRABAD');

INSERT INTO PUBLISHER VALUES ('HACHETTE LIVRE', 8970862340, 'CHENAI');

INSERT INTO PUBLISHER VALUES ('GRUPO PLANETA', 7756120238, 'BANGALORE');

select \* from publisher;

CREATE TABLE BOOK (BOOK\_ID INTEGER PRIMARY KEY, TITLE VARCHAR2 (20), PUB\_YEAR VARCHAR2 (20), PUBLISHER\_NAME REFERENCES PUBLISHER (NAME) ON DELETE CASCADE);

INSERT INTO BOOK VALUES (1,'DBMS','JAN-2017', 'MCGRAW-HILL');

INSERT INTO BOOK VALUES (2,'ADBMS','JUN-2016', 'MCGRAW-HILL');

INSERT INTO BOOK VALUES (3,'CN','SEP-2016', 'PEARSON');

INSERT INTO BOOK VALUES (4,'CG','SEP-2015', 'GRUPO PLANETA');

INSERT INTO BOOK VALUES (5,'OS','MAY-2016', 'PEARSON');

select \* from book;

CREATE TABLE BOOK\_AUTHORS (AUTHOR\_NAME VARCHAR2 (20), BOOK\_ID REFERENCES BOOK (BOOK\_ID) ON DELETE CASCADE, PRIMARY KEY (BOOK\_ID, AUTHOR\_NAME));

INSERT INTO BOOK\_AUTHORS VALUES ('NAVATHE', 1);

INSERT INTO BOOK\_AUTHORS VALUES ('NAVATHE', 2);

INSERT INTO BOOK\_AUTHORS VALUES ('TANENBAUM', 3);

INSERT INTO BOOK\_AUTHORS VALUES ('EDWARD ANGEL', 4);

INSERT INTO BOOK\_AUTHORS VALUES ('GALVIN', 5);

select \* from book\_authors;

CREATE TABLE LIBRARY\_BRANCH (BRANCH\_ID INTEGER PRIMARY KEY, BRANCH\_NAME VARCHAR2 (50), ADDRESS VARCHAR2 (50));

INSERT INTO LIBRARY\_BRANCH VALUES (10,'RR NAGAR','BANGALORE');

INSERT INTO LIBRARY\_BRANCH VALUES (11,'RNSIT','BANGALORE');

INSERT INTO LIBRARY\_BRANCH VALUES (12,'RAJAJI NAGAR', 'BANGALORE');

INSERT INTO LIBRARY\_BRANCH VALUES (13,'NITTE','MANGALORE');

INSERT INTO LIBRARY\_BRANCH VALUES (14,'MANIPAL','UDUPI');

select \* from LIBRARY\_BRANCH;

CREATE TABLE BOOK\_COPIES (NO\_OF\_COPIES INTEGER, BOOK\_ID REFERENCES BOOK (BOOK\_ID) ON DELETE CASCADE, BRANCH\_ID REFERENCES LIBRARY\_BRANCH (BRANCH\_ID) ON DELETE CASCADE, PRIMARY KEY (BOOK\_ID, BRANCH\_ID));

INSERT INTO BOOK\_COPIES VALUES (10, 1, 10);

INSERT INTO BOOK\_COPIES VALUES (5, 1, 11);

INSERT INTO BOOK\_COPIES VALUES (2, 2, 12);

INSERT INTO BOOK\_COPIES VALUES (5, 2, 13);

INSERT INTO BOOK\_COPIES VALUES (7, 3, 14);

INSERT INTO BOOK\_COPIES VALUES (1, 5, 10);

INSERT INTO BOOK\_COPIES VALUES (3, 4, 11);

select \* from BOOK\_COPIES;

CREATE TABLE CARD (CARD\_NO INTEGER PRIMARY KEY);

INSERT INTO CARD VALUES (100);

INSERT INTO CARD VALUES (101);

INSERT INTO CARD VALUES (102);

INSERT INTO CARD VALUES (103);

INSERT INTO CARD VALUES (104);

select \* from card;

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

INSERT INTO BOOK\_LENDING VALUES ('01-JAN-17','01-JUN-17', 1, 10, 101);

INSERT INTO BOOK\_LENDING VALUES ('11-JAN-17','11-MAR-17', 3, 14, 101);

INSERT INTO BOOK\_LENDING VALUES ('21-FEB-17','21-APR-17', 2, 13, 101);

INSERT INTO BOOK\_LENDING VALUES ('15-MAR-17','15-JUL-17', 4, 11, 101);

INSERT INTO BOOK\_LENDING VALUES ('12-APR-17','12-MAY-17', 1, 11, 104);

select \* from BOOK\_LENDING;

/\*Retrieve details of all books in the library – id, title, name of publisher, authors, number of copies in each branch, etc. \*/

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;

/\*Get the particulars of borrowers who have borrowed more than 3 books, but from Jan 2017 to Jun 2017. \*/

SELECT CARD\_NO

FROM BOOK\_LENDING

WHERE DATE\_OUT BETWEEN 01-JAN-2017' AND '01-JUL-2017'

GROUP BY CARD\_NO

HAVING COUNT (\*)>3;

/\*Delete a book in BOOK table. Update the contents of other tables to reflect this data manipulation operation. \*/

DELETE FROM BOOK

WHERE BOOK\_ID=3;

/\*Partition the BOOK table based on year of publication. Demonstrate its working with a simple query. \*/

CREATE VIEW V\_PUBLICATION AS

SELECT PUB\_YEAR

FROM BOOK;

select \* from v\_publication;

/\*Create a view of all books and its number of copies that are currently available in the Library. \*/

CREATE VIEW V\_BOOKS AS

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

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

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

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

select \* from v\_books;