## PROGRAM 7: BOOK DEALER DATABASE

The following tables are maintained by a book dealer:

AUTHOR(author-id: int, name: String, city: String, country: String)

PUBLISHER(publisher-id: int, name: String, city: String, country: String)

CATALOG (book-id: int, title: String, author-id: int, publisher-id: int, category-id:

int, year: int, price: int)

CATEGORY(category-id: int, description: String)

ORDER-DETAILS(order-no: int, book-id: int, quantity: int)

- i. Create the above tables by properly specifying the primary keys and the foreign keys.
- ii. Enter at least five tuples for each relation.
- iii. Give the details of the authors who have 2 or more books in the catalog and the price of the books in the catalog and the year of publication is after 2000.
- iv. Find the author of the book which has maximum sales.
- v. Demonstrate how you increase the price of books published by a specific publisher by 10%.

```
CREATE DATABASE BOOK;
USE BOOK;

CREATE TABLE AUTHORS(
   AUTHOR_ID INT,
   A_NAME VARCHAR(10),
   CITY VARCHAR(10),
   COUNTRY VARCHAR(10),
   PRIMARY KEY(AUTHOR_ID)
   );
```

**CREATE TABLE PUBLISHERS(** 

```
PUBLISHER_ID INT,
 P NAME VARCHAR(10),
 CITY VARCHAR(20),
 COUNTRY VARCHAR(10),
 PRIMARY KEY(PUBLISHER_ID)
 );
CREATE TABLE CATEGORY(
 CATEGORY_ID INT,
 DESCRIPTIONS VARCHAR(10),
 PRIMARY KEY(CATEGORY_ID)
 );
CREATE TABLE CATALOG(
 BOOK ID INT,
 TITLE VARCHAR(10),
 AUTHOR_ID INT,
 PUBLISHER_ID INT,
 CATEGORY ID INT,
 P YEAR INT,
 PRICE INT,
 PRIMARY KEY(BOOK_ID),
 FOREIGN KEY(AUTHOR_ID) REFERENCES AUTHORS(AUTHOR_ID),
 FOREIGN KEY(PUBLISHER_ID) REFERENCES PUBLISHERS(PUBLISHER_ID),
 FOREIGN KEY(CATEGORY_ID) REFERENCES CATEGORY(CATEGORY_ID)
 );
CREATE TABLE ORDER_DETAILS(
 ORDER_NO INT,
```

```
BOOK_ID INT,

QTY INT,

PRIMARY KEY(ORDER_NO),

FOREIGN KEY (BOOK_ID) REFERENCES CATALOG(BOOK_ID)

);
```

INSERT INTO AUTHORS VALUES(10,'SAM','BLORE','INDIA');

INSERT INTO AUTHORS VALUES(20,'SHAAN','COORG','INDIA');

INSERT INTO AUTHORS VALUES(30, 'SARA', 'CA', 'USA');

INSERT INTO AUTHORS VALUES(40, 'AYMAN', 'SPAIN', 'BARCELONA');

INSERT INTO AUTHORS VALUES(50, 'TANYA', 'DELHI', 'INDIA');



**SELECT \* FROM AUTHORS;** 

INSERT INTO PUBLISHERS VALUES(1,'PHI','NY','USA');

INSERT INTO PUBLISHERS VALUES(2,'EEE','LA','USA');

INSERT INTO PUBLISHERS VALUES(3,'SWAPNA',",'INDIA');

INSERT INTO PUBLISHERS VALUES(4, 'MGH', 'NY', 'USA');

INSERT INTO PUBLISHERS VALUES(5, 'PEARSON', 'DELHI', 'INDIA');



SELECT \* FROM PUBLISHERS;

```
INSERT INTO CATEGORY VALUES(11, 'CS');
INSERT INTO CATEGORY VALUES(22, 'EC');
INSERT INTO CATEGORY VALUES(33, 'OS');
INSERT INTO CATEGORY VALUES(44, 'C++');
```

INSERT INTO CATEGORY VALUES(55, 'DBMS');



SELECT \* FROM CATEGORY;

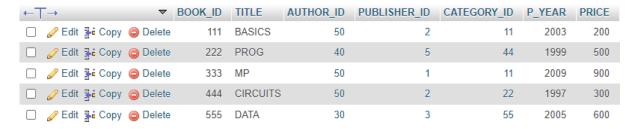
INSERT INTO CATALOG VALUES(111, BASICS', 50, 2, 11, 2003, 200);

INSERT INTO CATALOG VALUES(222, 'PROG', 40, 5, 44, 1999, 500);

INSERT INTO CATALOG VALUES(333, MP', 50, 1, 11, 2009, 900);

INSERT INTO CATALOG VALUES(444, 'CIRCUITS', 50, 2, 22, 1997, 300);

INSERT INTO CATALOG VALUES(555, 'DATA', 30, 3, 55, 2005, 600);



SELECT \* FROM CATALOG;

INSERT INTO ORDER\_DETAILS VALUES(123,222,100);
INSERT INTO ORDER\_DETAILS VALUES(231,111,150);
INSERT INTO ORDER\_DETAILS VALUES(143,333,90);

INSERT INTO ORDER\_DETAILS VALUES(156,555,200);

INSERT INTO ORDER DETAILS VALUES(218,444,70);



SELECT \* FROM ORDER DETAILS;

SELECT A.A\_NAME,C.TITLE,C.PRICE FROM AUTHORS A,CATALOG C WHERE C.AUTHOR\_ID=A.AUTHOR\_ID AND C.P\_YEAR>=2000 AND A.A\_NAME=(SELECT A.A\_NAME FROM AUTHORS A,CATALOG C WHERE A.AUTHOR\_ID=C.AUTHOR\_ID GROUP BY C.AUTHOR\_ID HAVING COUNT(\*)>=2); #1



SELECT A.A\_NAME FROM AUTHORS A,CATALOG C,ORDER\_DETAILS O WHERE
O.BOOK\_ID=C.BOOK\_ID AND A.AUTHOR\_ID=C.AUTHOR\_ID AND O.BOOK\_ID=(SELECT
BOOK\_ID FROM ORDER\_DETAILS WHERE QTY=(SELECT MAX(QTY) FROM ORDER\_DETAILS));
#2



UPDATE CATALOG SET PRICE=1.10\*PRICE;

SELECT \* FROM CATALOG;

<b>←</b> T→ '	■ BOOK_ID	TITLE	AUTHOR_ID	PUBLISHER_ID	CATEGORY_ID	P_YEAR	PRICE
☐ Ø Edit ♣ Copy   Dele	te 111	BASICS	50	2	11	2003	220
☐ Ø Edit ♣ Copy   □ Dele	te 222	PROG	40	5	44	1999	550
☐      Ø Edit      Gopy    Opele	te 333	MP	50	1	11	2009	990
☐ Ø Edit ♣ Copy ⊜ Dele	te 444	CIRCUITS	50	2	22	1997	330
☐ Ø Edit ♣ Copy ⊜ Dele	te 555	DATA	30	3	55	2005	660