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.

```
MySQL returned an empty result set (i.e. zero rows), (Query took 0.0010 seconds.)
 use bookDealer
[Edit inline][Edit][Create PHP code]
 MySQL returned an empty result set (i.e. zero rows). (Query took 0.3290 seconds.)
 CREATE TABLE author ( Author_id INT PRIMARY KEY, Name VARCHAR(20), City VARCHAR(20), Country VARCHAR(20) )
[ Edit inline ] [ Edit ] [ Create PHP code ]
 MySQL returned an empty result set (i.e. zero rows). (Query took 0.2630 seconds.)
 CREATE TABLE publisher ( Publisher id INT PRIMARY KEY, Name VARCHAR(20), City VARCHAR(20), Country VARCHAR(20) )
[ Edit inline ] [ Edit ] [ Create PHP code ]
 MySQL returned an empty result set (i.e. zero rows). (Query took 0.7960 seconds.)
 CREATE TABLE category ( Category id INT PRIMARY KEY, Description VARCHAR(30) )
[ Edit inline ] [ Edit ] [ Create PHP code ]
 MySQL returned an empty result set (i.e. zero rows). (Query took 0.2740 seconds.)
 Create TABLE catalogue( Book id INT PRIMARY KEY, Book title VARCHAR(30), Author id INT, Publisher id INT, Category id INT, Cyear INT,
 Price INT, FOREIGN KEY(author id) REFERENCES author(author id) on UPDATE cascade on DELETE cascade, FOREIGN KEY(publisher id) REFERENCES
 publisher(publisher id) on UPDATE cascade on DELETE cascade, FOREIGN KEY(category id) REFERENCES category(category id)on UPDATE cascade
 on DELETE CASCADE )
[Edit inline][Edit][Create PHP code]
 MySQL returned an empty result set (i.e. zero rows). (Query took 0.3600 seconds.)
 CREATE TABLE orderdetails( Order no INT PRIMARY KEY, Book id INT, Quantity INT, FOREIGN KEY(book id) REFERENCES catalogue(book id) on
 UPDATE cascade on DELETE CASCADE )
[ Edit inline ] [ Edit ] [ Create PHP code ]
```

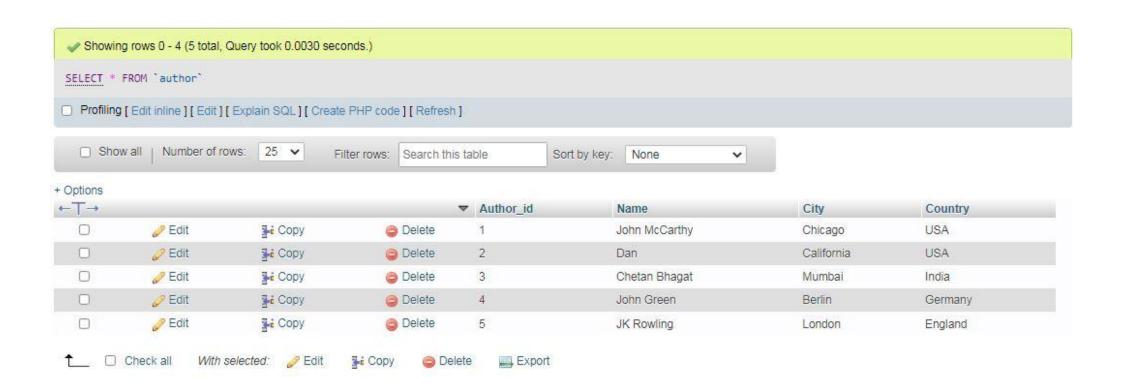
Table 🔺	Actio	n						Rows	0	Туре	Collation	Size	Overhead
author		Browse	M Structure	Search	∄-å Insert	₩ Empty	Drop		0	InnoDB	utf8mb4_general_ci	16.0 KiB	-
catalogue	会	Browse	M Structure	· Search	∄≟ Insert	₩ Empty	Drop		0	InnoDB	utf8mb4_general_ci	64.0 KiB	-
category		Browse	M Structure	Search	3- ≟ Insert	Empty	Drop		0	InnoDB	utf8mb4_general_ci	16.0 KiB	
orderdetails	会	Browse		♣ Search	3 - insert	₩ Empty	Drop		0	InnoDB	utf8mb4_general_ci	32.0 KiB	-
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5 tables	Sum								0	InnoDB	utf8mb4 general ci	144.0 KiB	0 B

ii. Enter at least five tuples for each relation.

```
1 row inserted. (Query took 0.0430 seconds.)
 INSERT INTO author VALUES (1, 'John McCarthy', 'Chicago', 'USA')
[ Edit inline ] [ Edit ] [ Create PHP code ]
 1 row inserted. (Query took 0.1210 seconds.)
 INSERT INTO author VALUES (2, 'Dan', 'California', 'USA')
[ Edit inline ] [ Edit ] [ Create PHP code ]
 1 row inserted. (Query took 0.0420 seconds.)
 INSERT INTO author VALUES (3, 'Chetan Bhagat', 'Mumbai', 'India')
[ Edit inline ] [ Edit ] [ Create PHP code ]
 1 row inserted. (Query took 0.0470 seconds.)
 INSERT INTO author VALUES (4, 'John Green', 'Berlin', 'Germany')
[ Edit inline ] [ Edit ] [ Create PHP code ]

√ 1 row inserted. (Query took 0.0260 seconds.)

 INSERT INTO author VALUES (5,'JK Rowling','London','England')
[ Edit inline ] [ Edit ] [ Create PHP code ]
```



```
√ 1 row inserted. (Query took 0.0550 seconds.)

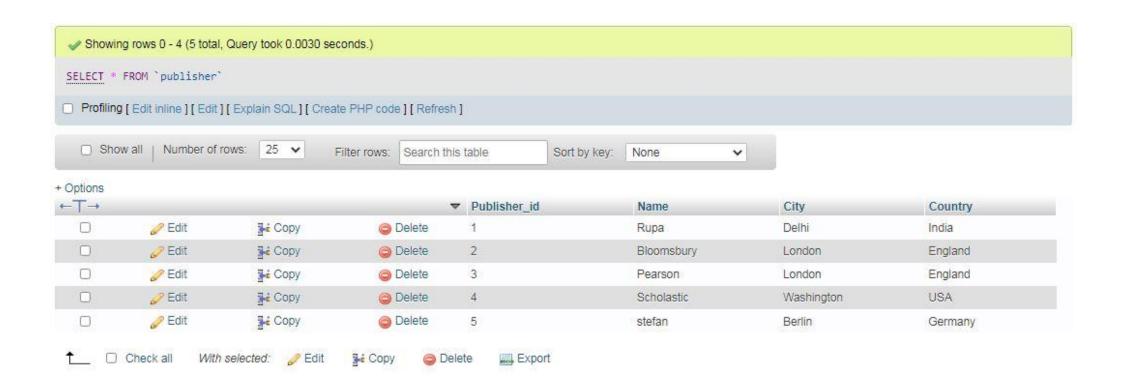
 INSERT INTO publisher VALUES (1, 'Rupa', 'Delhi', 'India')
[ Edit inline ] [ Edit ] [ Create PHP code ]

√ 1 row inserted. (Query took 0.0830 seconds.)

 INSERT INTO publisher VALUES (2, 'Bloomsbury', 'London', 'England')
[ Edit inline ] [ Edit ] [ Create PHP code ]
 1 row inserted. (Query took 0.0440 seconds.)
 INSERT INTO publisher VALUES (3, 'Pearson', 'London', 'England')
[ Edit inline ] [ Edit ] [ Create PHP code ]
 1 row inserted. (Query took 0.0320 seconds.)
 INSERT INTO publisher VALUES (4, 'Scholastic', 'Washington', 'USA')
[ Edit inline ] [ Edit ] [ Create PHP code ]

√ 1 row inserted. (Query took 0.0300 seconds.)

 INSERT INTO publisher VALUES (5, 'stefan', 'Berlin', 'Germany')
[ Edit inline ] [ Edit ] [ Create PHP code ]
```



```
√ 1 row inserted. (Query took 0.0490 seconds.)

 INSERT INTO `catalogue` VALUES (1, 'Harry Potter 1',5,1,1,2002,600)
[ Edit inline ] [ Edit ] [ Create PHP code ]

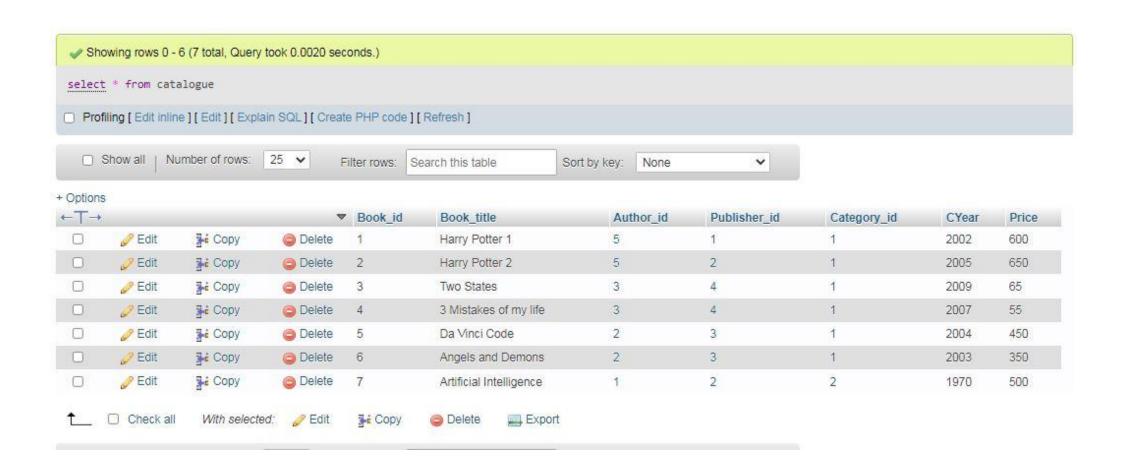
√ 1 row inserted. (Query took 0.0980 seconds.)
 INSERT INTO `catalogue` VALUES(2, 'Harry Potter 2',5,2,1,2005,650)
[Edit inline] [Edit] [Create PHP code]
 1 row inserted. (Query took 0.0390 seconds.)
 INSERT INTO `catalogue` VALUES (3,'Two States',3,4,1,2009,65)
[ Edit inline ] [ Edit ] [ Create PHP code ]

√ 1 row inserted. (Query took 0.0290 seconds.)

 INSERT INTO `catalogue` VALUES (4,'3 Mistakes of my life',3,4,1,2007,55)
[ Edit inline ] [ Edit ] [ Create PHP code ]

√ 1 row inserted. (Query took 0.0340 seconds.)

 INSERT INTO `catalogue` VALUES(5, 'Da Vinci Code', 2, 3, 1, 2004, 450)
[Edit inline][Edit][Create PHP code]
 1 row inserted. (Query took 0.0340 seconds.)
 INSERT INTO `catalogue` VALUES (6, 'Angels and Demons', 2, 3, 1, 2003, 350)
[Edit inline][Edit][Create PHP code]
 1 row inserted. (Query took 0.0290 seconds.)
 INSERT INTO 'catalogue' VALUES (7, 'Artificial Intelligence',1,2,2,1970,500)
[ Edit inline ] [ Edit ] [ Create PHP code ]
```



```
√ 1 row inserted. (Query took 0.0510 seconds.)

 Insert INTO category VALUES (1, 'Fiction')
[ Edit inline ] [ Edit ] [ Create PHP code ]

√ 1 row inserted. (Query took 0.1900 seconds.)

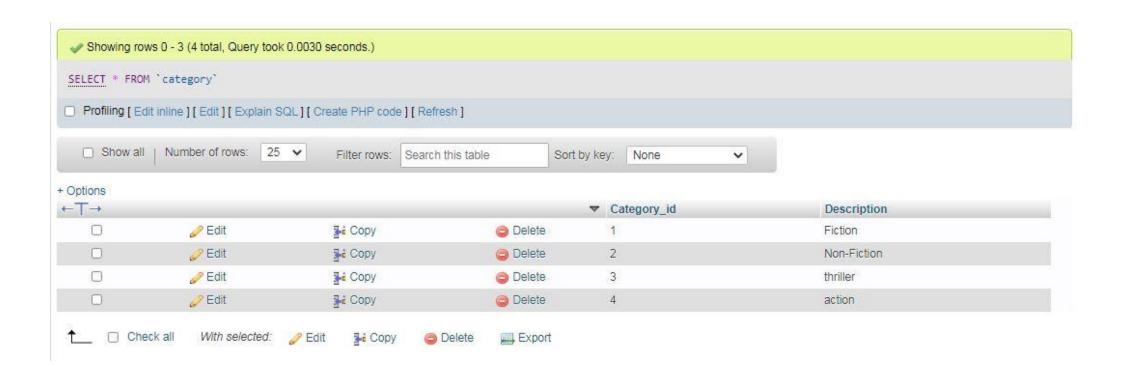
 Insert INTO category VALUES(2, 'Non-Fiction')
[ Edit inline ] [ Edit ] [ Create PHP code ]

√ 1 row inserted. (Query took 0.0520 seconds.)

 Insert INTO category VALUES(3, 'thriller')
[ Edit inline ] [ Edit ] [ Create PHP code ]

√ 1 row inserted. (Query took 0.0310 seconds.)

 Insert INTO category VALUES(4, 'action')
[ Edit inline ] [ Edit ] [ Create PHP code ]
```



```
√ 1 row inserted. (Query took 0.0420 seconds.)

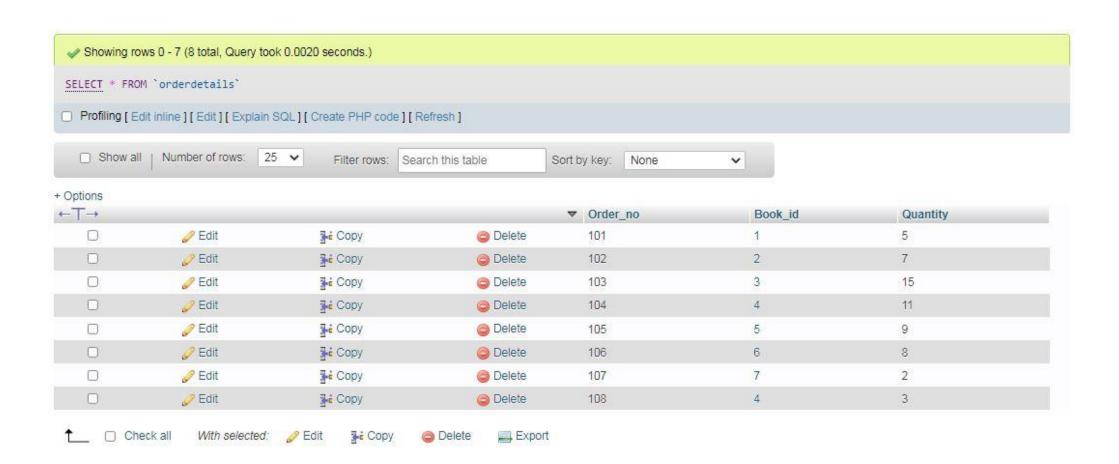
 INSERT INTO orderdetails VALUES (101,1,5)
[ Edit inline ] [ Edit ] [ Create PHP code ]
 1 row inserted. (Query took 0.0720 seconds.)
 INSERT INTO orderdetails VALUES (102,2,7)
[ Edit inline ] [ Edit ] [ Create PHP code ]
 1 row inserted. (Query took 0.0380 seconds.)
 INSERT INTO orderdetails VALUES (103,3,15)
[ Edit inline ] [ Edit ] [ Create PHP code ]

✓ 1 row inserted. (Query took 0.0370 seconds.)

 INSERT INTO orderdetails VALUES (104,4,11)
[ Edit inline ] [ Edit ] [ Create PHP code ]

✓ 1 row inserted. (Query took 0.0350 seconds.)

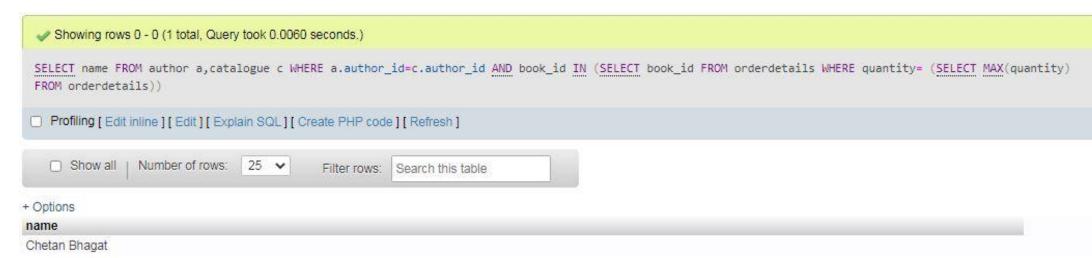
 INSERT INTO orderdetails VALUES (105,5,9)
[ Edit inline ] [ Edit ] [ Create PHP code ]
 1 row inserted. (Query took 0.0360 seconds.)
 INSERT INTO orderdetails VALUES (106,6,8)
[ Edit inline ] [ Edit ] [ Create PHP code ]
 1 row inserted. (Query took 0.0350 seconds.)
 INSERT INTO orderdetails VALUES (107,7,2)
[ Edit inline ] [ Edit ] [ Create PHP code ]
 1 row inserted. (Query took 0.2310 seconds.)
 INSERT INTO orderdetails VALUES (108,4,3)
```



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%.

