### PROGRAM 7. BOOK DEALER DATABASE

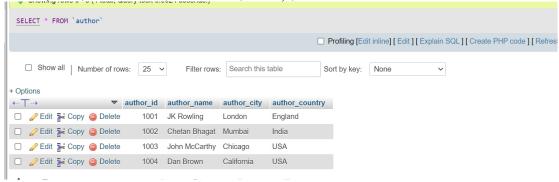
The following tables are maintained by a book dealer:

```
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.
CREATE DATABASE book dealer;
CREATE TABLE author (
   author id INT,
   author name VARCHAR(20),
   author city VARCHAR(20),
   author country VARCHAR(20),
   PRIMARY KEY(author id));
CREATE TABLE publisher (
   publisher id INT,
   publisher name VARCHAR(20),
   publisher city VARCHAR(20),
   publisher country VARCHAR(20),
   PRIMARY KEY(publisher id));
CREATE TABLE category (
   category id INT,
   description VARCHAR(30),
   PRIMARY KEY(category id));
CREATE TABLE catalogue(
   book id INT,
   book title VARCHAR(30),
   author id INT,
   publisher id INT,
   category id INT,
   year INT,
   price INT,
   PRIMARY KEY(book id),
   FOREIGN KEY(author id) REFERENCES author(author id),
   FOREIGN KEY(publisher id) REFERENCES publisher(publisher id),
   FOREIGN KEY(category id) REFERENCES category(category id))
```

```
CREATE TABLE orderdetails(
order_id INT,
book_id INT,
quantity INT,
PRIMARY KEY(order_id),
FOREIGN KEY(book id) REFERENCES catalogue(book id));
```

# ii. Enter at least five tuples for each relation.

INSERT INTO author (author\_id,author\_name,author\_city,author\_country) VALUES (1001,'JK Rowling','London','England'), (1002,'Chetan Bhagat','Mumbai','India'), (1003,'John McCarthy','Chicago','USA'), (1004,'Dan Brown','California','USA');

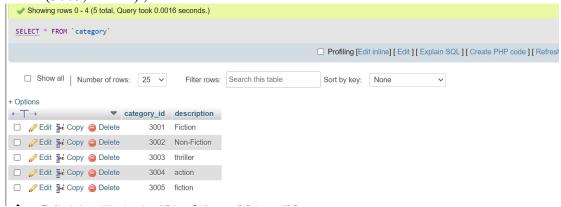


## **INSERT INTO publisher**



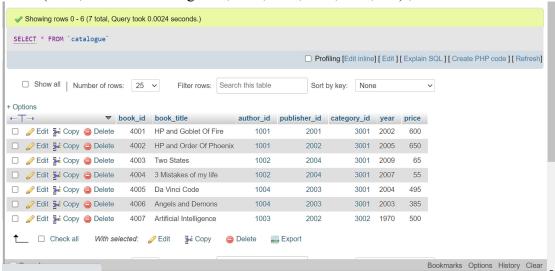
INSERT INTO category (category\_id,description) VALUES (3001,'Fiction'), (3002,'Non-Fiction'), (3003,'thriller'),

# (3004, 'action'), (3005, 'fiction');

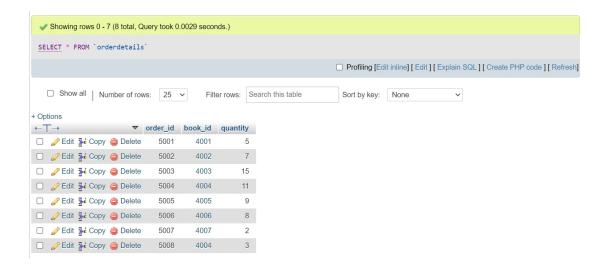


# INSERT INTO catalogue

```
(book_id,book_title,author_id,publisher_id,category_id,year,price) values (4001,'HP and Goblet Of Fire',1001,2001,3001,2002,600), (4002,'HP and Order Of Phoenix',1001,2002,3001,2005,650), (4003,'Two States',1002,2004,3001,2009,65), (4004,'3 Mistakes of my life',1002,2004,3001,2007,55), (4005,'Da Vinci Code',1004,2003,3001,2004,450), (4006,'Angels and Demons',1004,2003,3001,2003,350), (4007,'Artificial Intelligence',1003,2002,3002,1970,500);
```



# INSERT INTO orderdetails (order\_id,book\_id,quantity) VALUES (5001,4001,5), (5002,4002,7), (5003,4003,15), (5004,4004,11), (5005,4005,9), (5006,4006,8), (5007,4007,2), (5008,4004,3);



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.

SELECT \* FROM author WHERE author\_id IN (SELECT author\_id FROM catalogue WHERE year>2000 AND price> (SELECT AVG(price) FROM catalogue) GROUP BY author id HAVING COUNT(\*)>1);



iv)Find the author of the book which has maximum sales.

SELECT author\_name FROM author a,catalogue c WHERE a.author\_id=c.author\_id AND book\_id IN (SELECT book\_id FROM orderdetails WHERE quantity= (SELECT MAX(quantity) FROM orderdetails));



v. Demonstrate how you increase the price of books published by a specific publisher by 10%.

UPDATE catalogue SET price=1.1\*price
WHERE publisher\_id IN
(SELECT publisher\_id FROM publisher WHERE
publisher\_name='pearson');

