PROGRAM 7

The following tables are maintained by a Book Dealer:

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

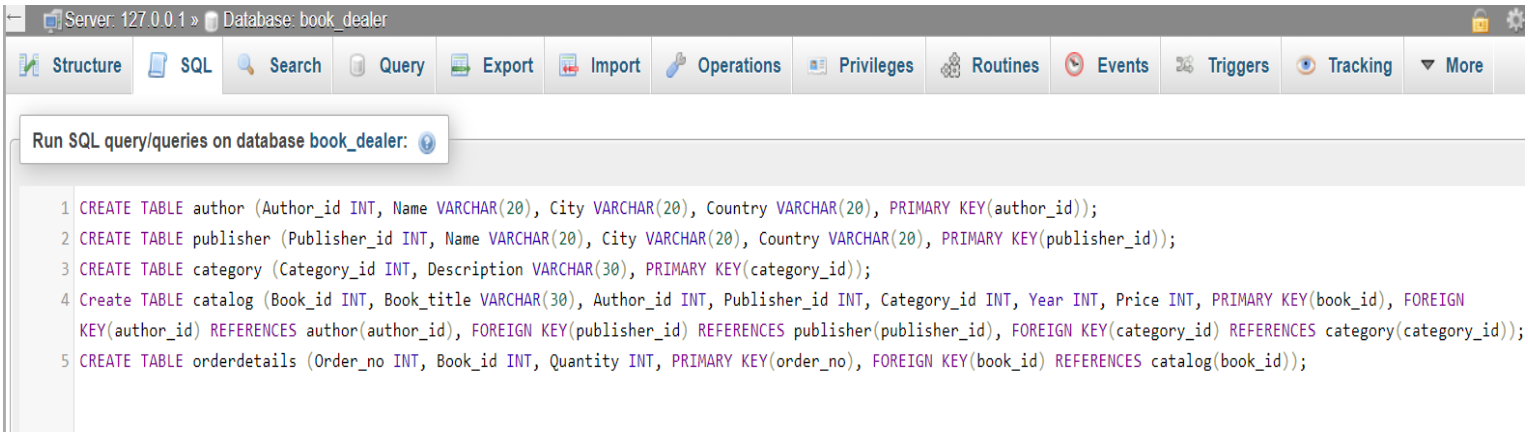
PUBLISHER(publisher-id: int, name: String, city: String, country: String)

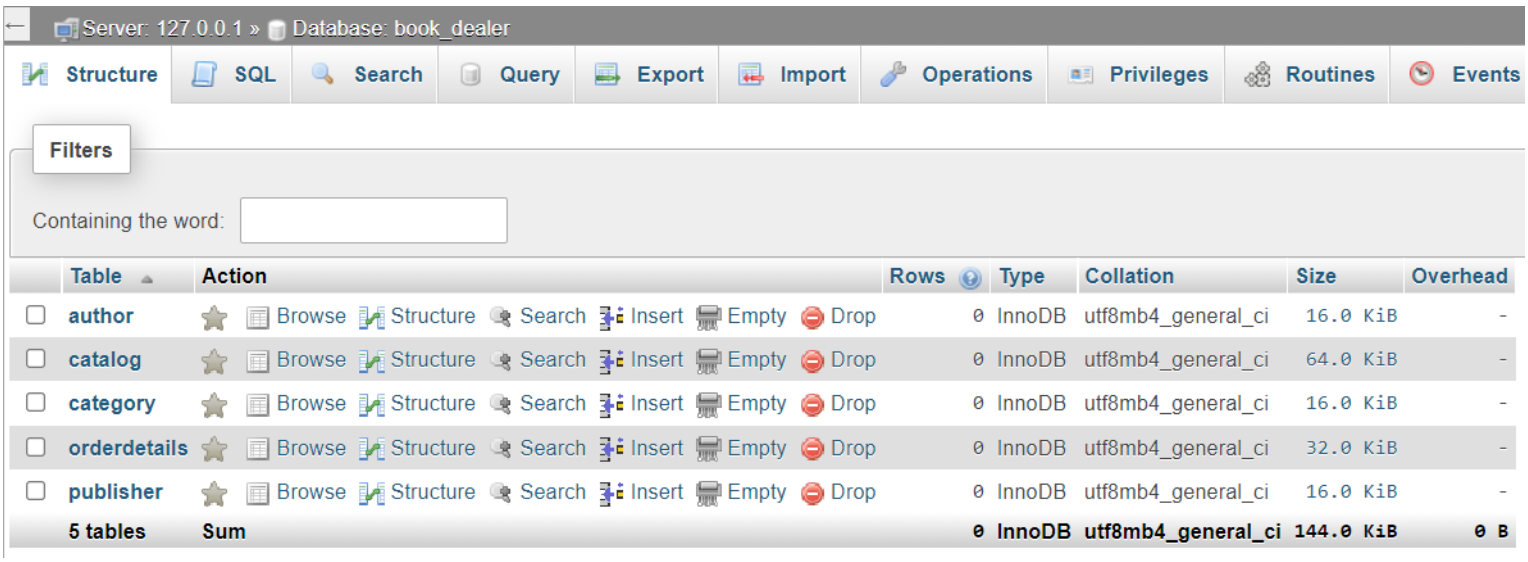
CATALOG(book-id: int, title: String, author-id: int, publisher-id: int, category-id: int, year: int, price: int)

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

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

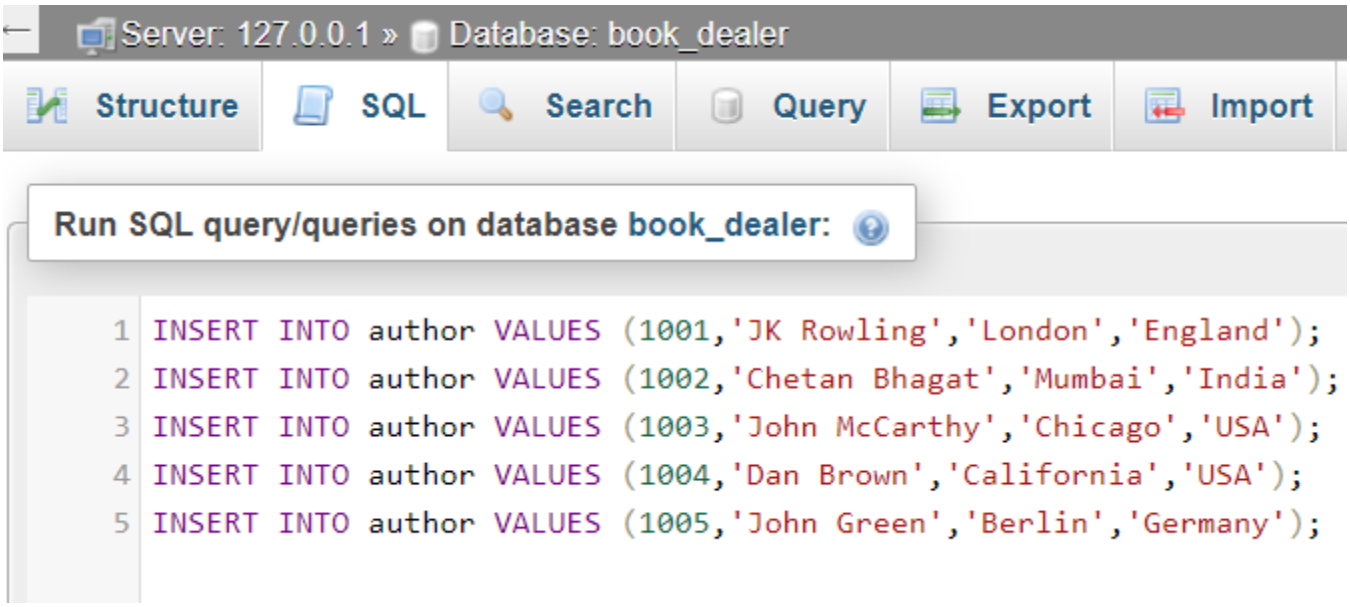
i. Create the above tables by properly specifying the primary keys and the foreign keys.

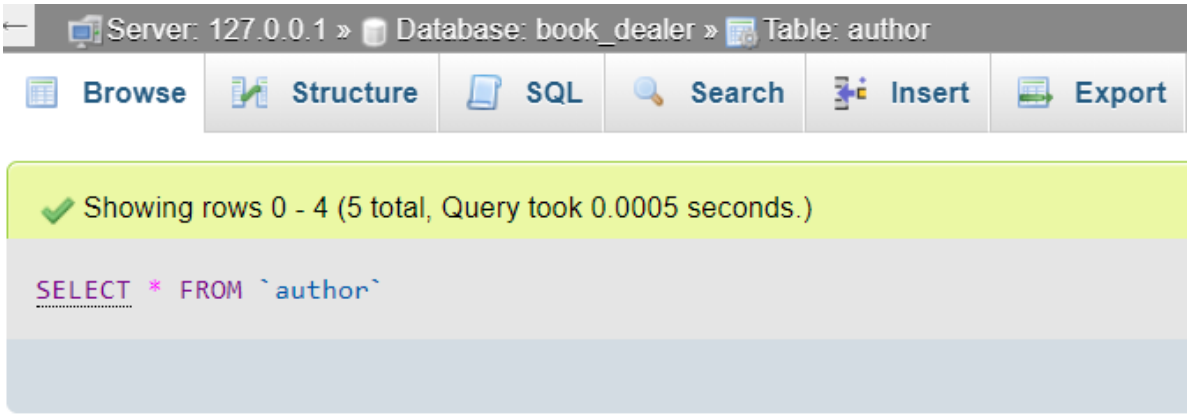




ii. Enter at least five tuples for each relation.

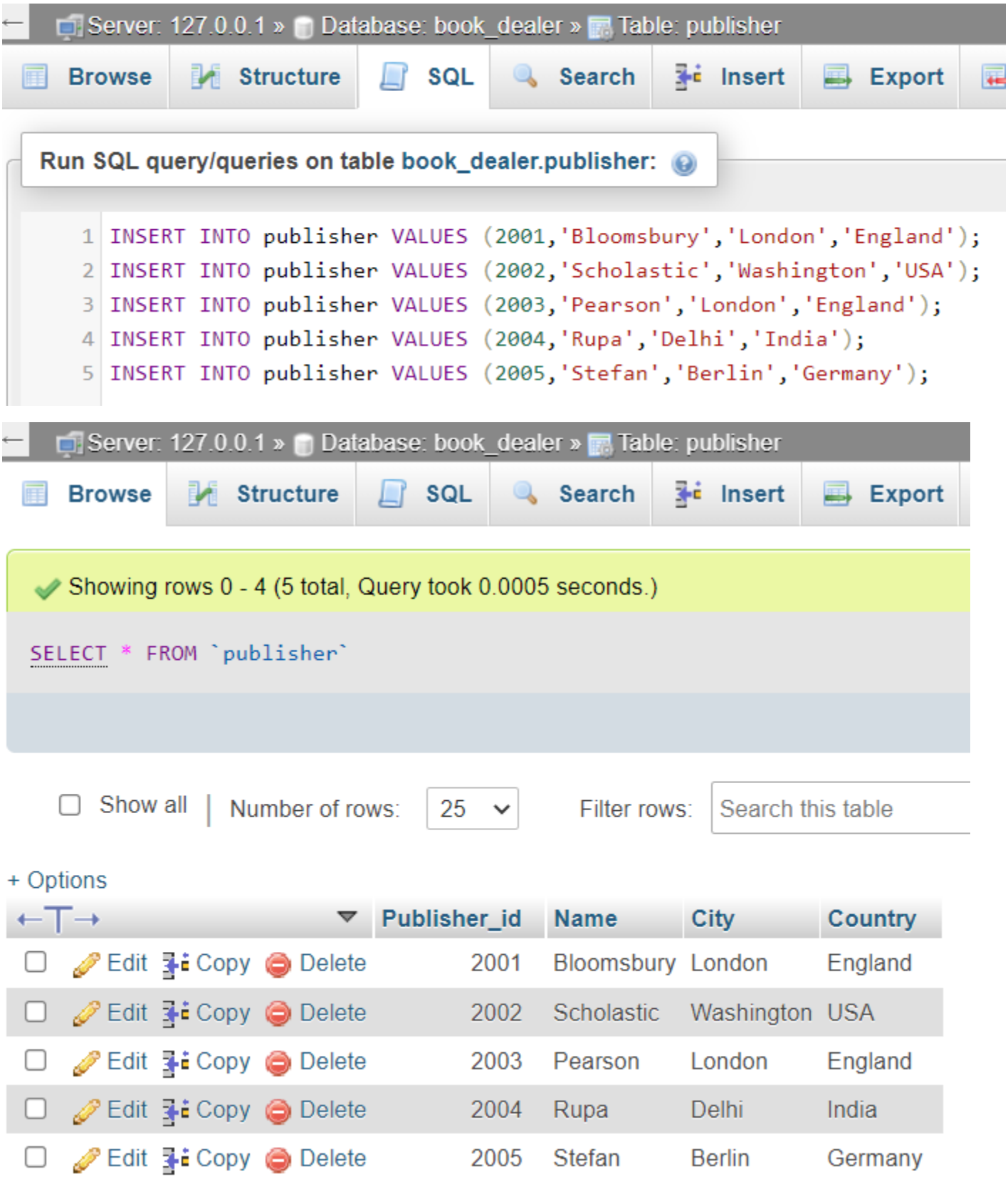
'AUTHOR' table:



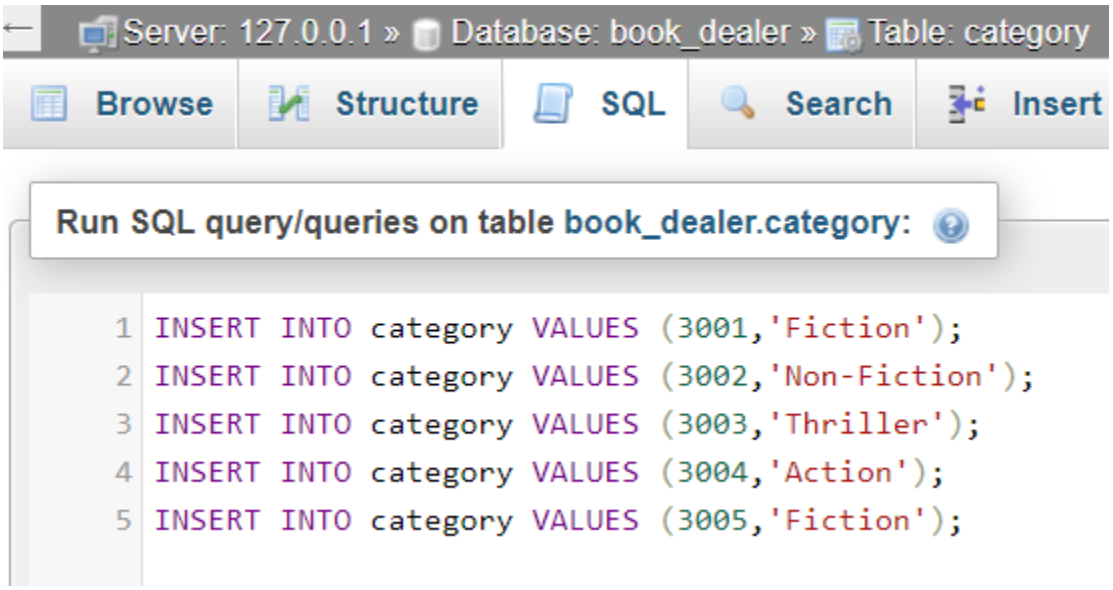


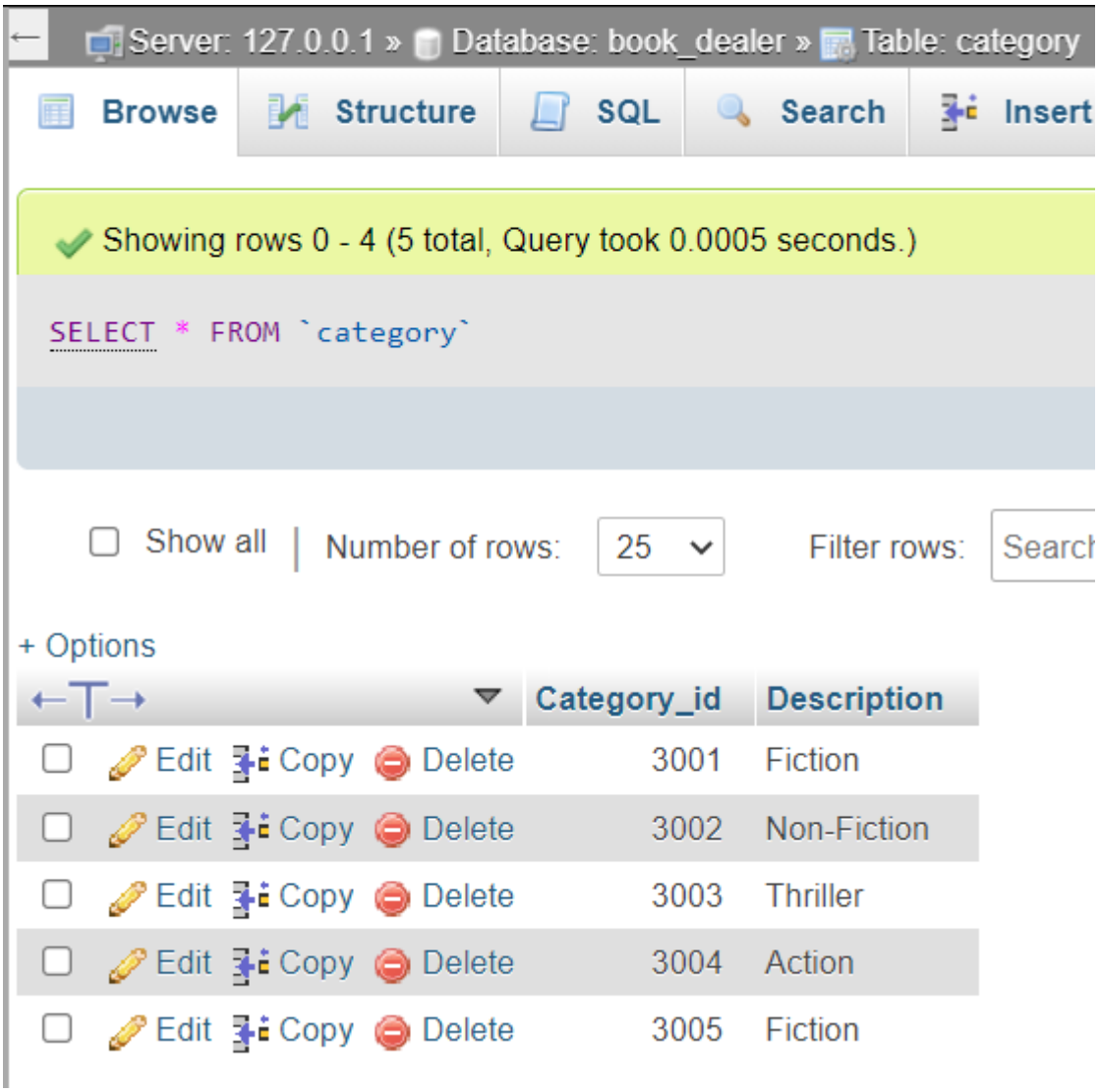
	Author_id	Name	City	Country
Edit Copy Delete	1001	JK Rowling	London	England
Edit Copy Delete	1002	Chetan Bhagat	Mumbai	India
Edit Copy Delete	1003	John McCarthy	Chicago	USA
Edit Copy Delete	1004	Dan Brown	California	USA
Edit Copy Delete	1005	John Green	Berlin	Germany

'PUBLISHER' table:

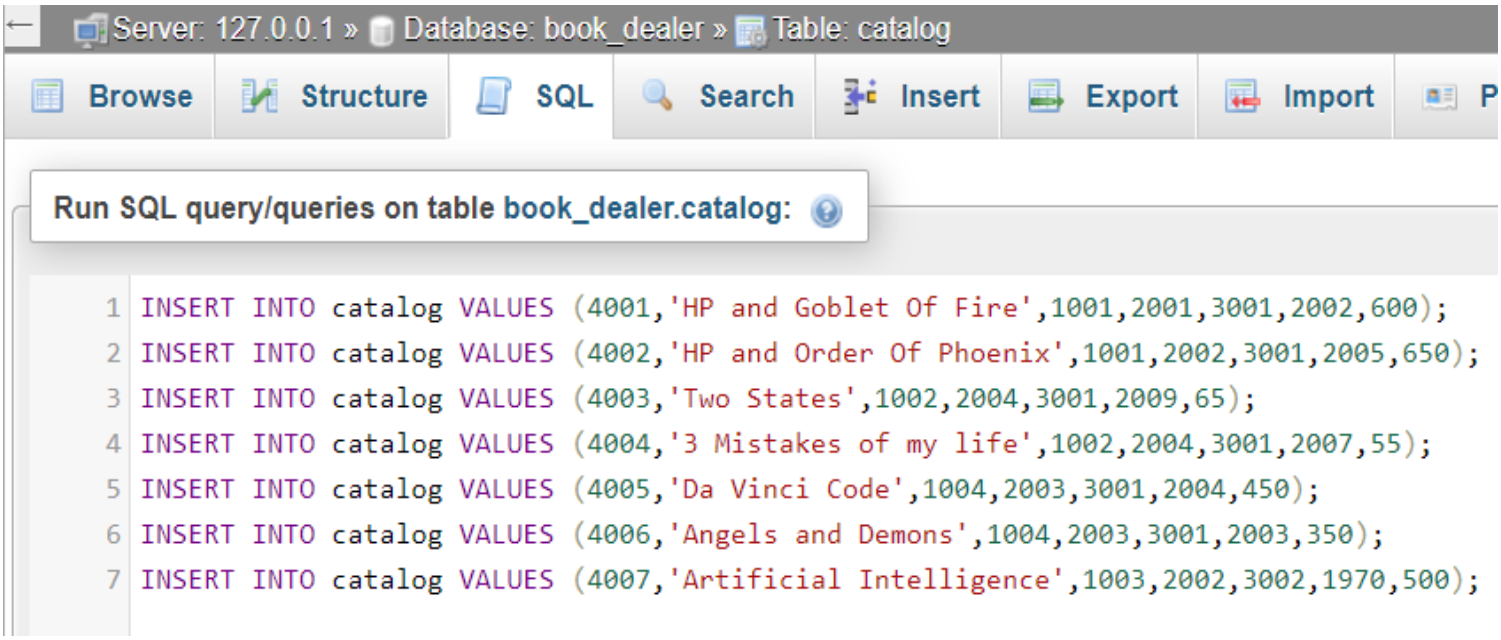


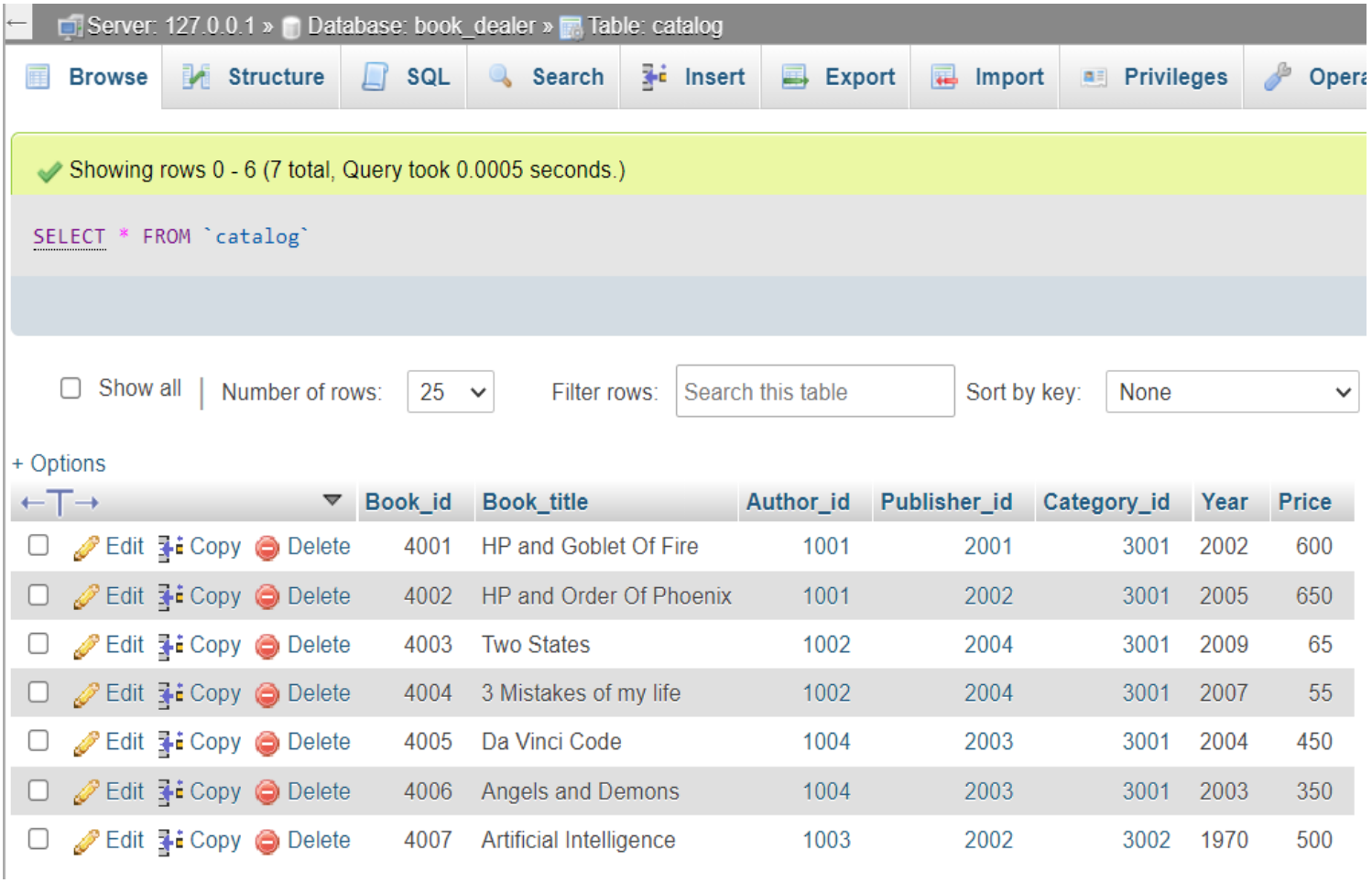
‘CATEGORY’ table:





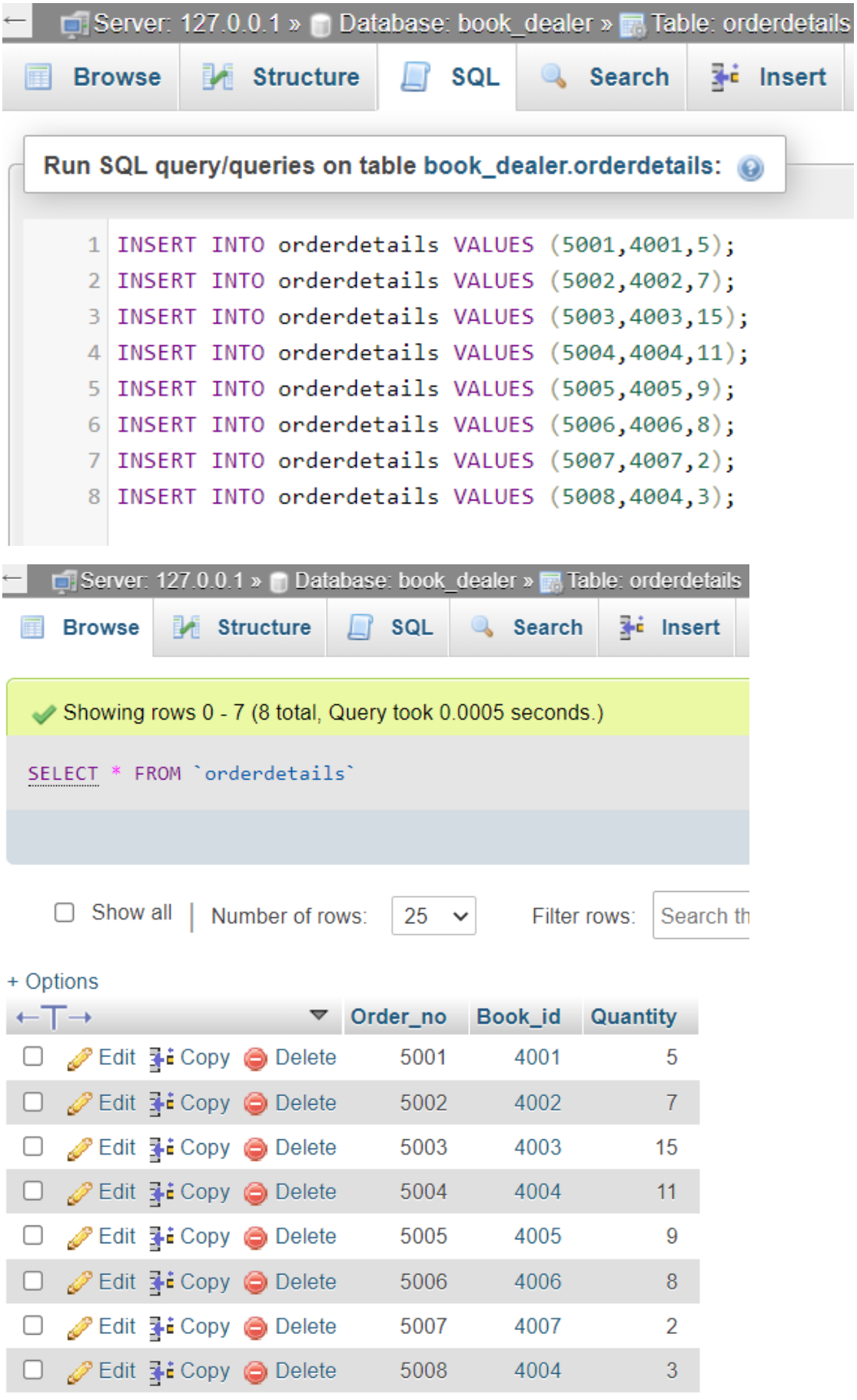
'CATALOG' table:





	Book_id	Book_title	Author_id	Publisher_id	Category_id	Year	Price
Edit Copy Delete	4001	HP and Goblet Of Fire	1001	2001	3001	2002	600
Edit Copy Delete	4002	HP and Order Of Phoenix	1001	2002	3001	2005	650
Edit Copy Delete	4003	Two States	1002	2004	3001	2009	65
Edit Copy Delete	4004	3 Mistakes of my life	1002	2004	3001	2007	55
Edit Copy Delete	4005	Da Vinci Code	1004	2003	3001	2004	450
Edit Copy Delete	4006	Angels and Demons	1004	2003	3001	2003	350
Edit Copy Delete	4007	Artificial Intelligence	1003	2002	3002	1970	500

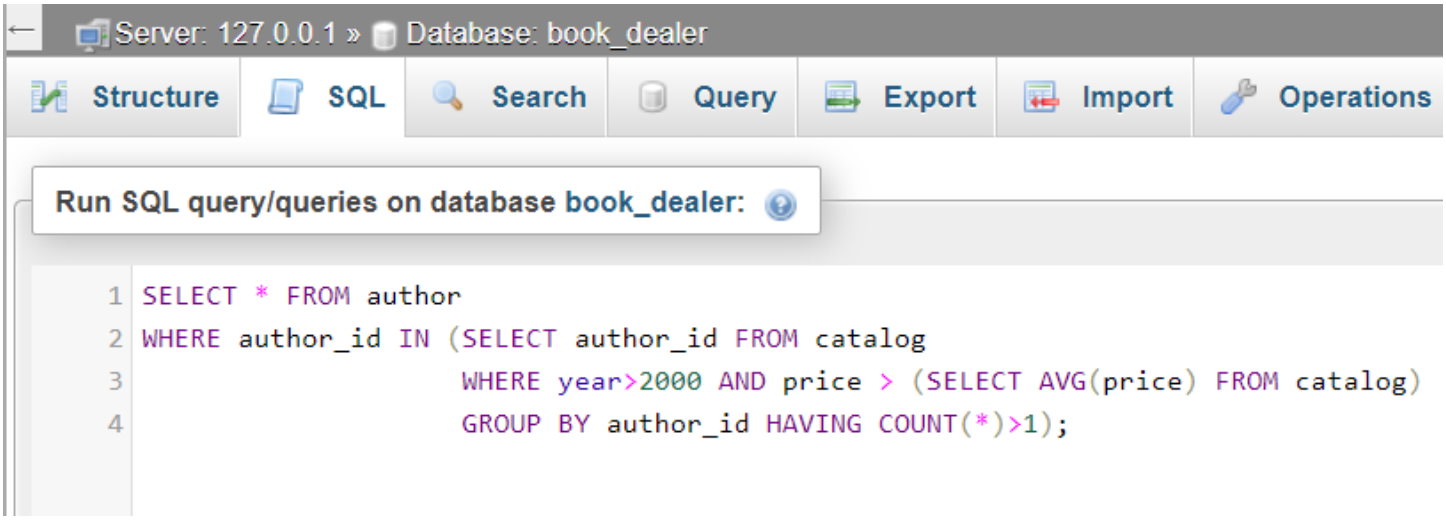
‘ORDER-DETAILS’ table:

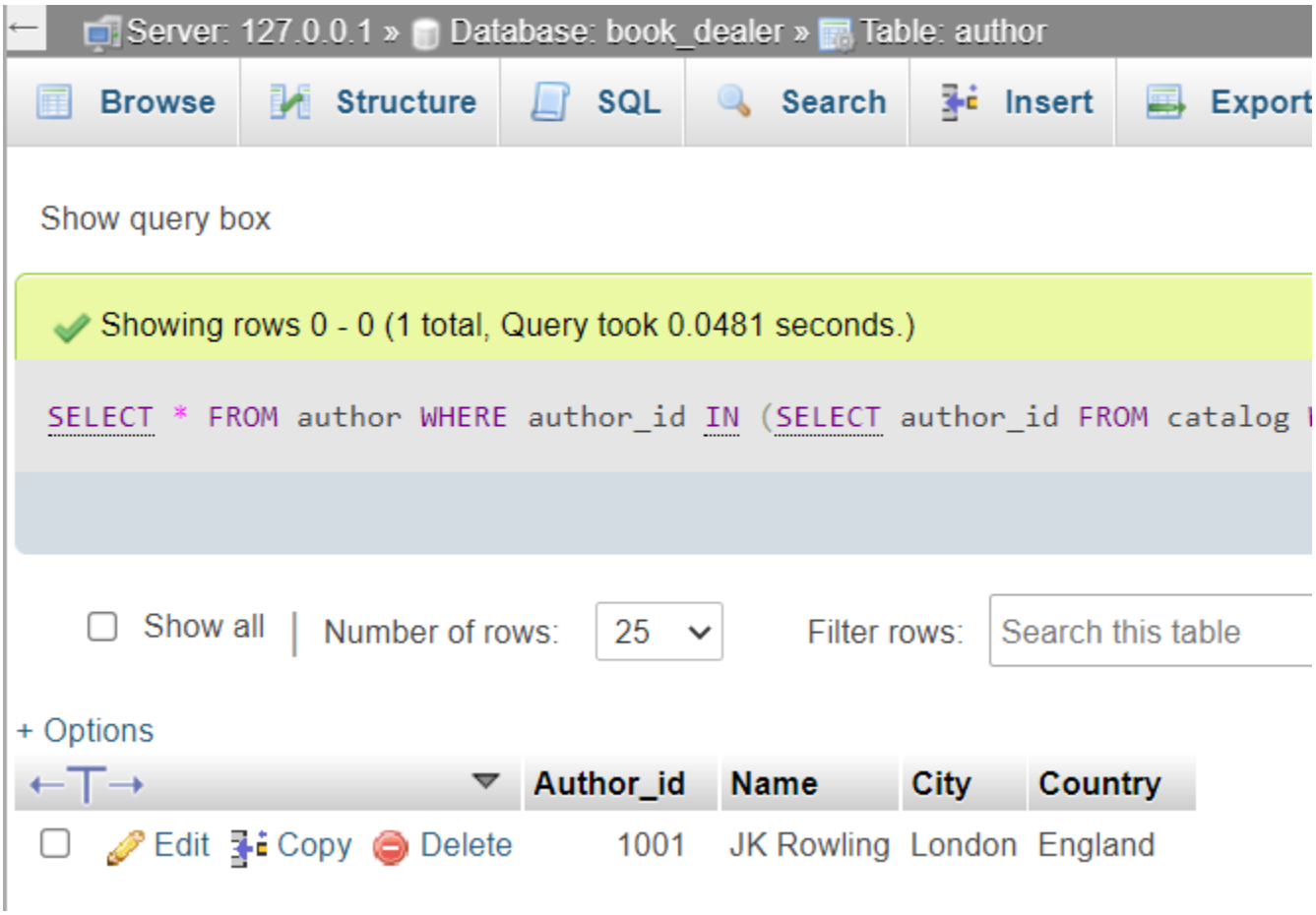


iii. Give the details of the authors who have 2 or more books in the catalog and the price of the books in the catalog and the year of publication is after 2000.

Query:

SELECT * FROM author WHERE author_id IN (SELECT author_id FROM catalog WHERE year>2000 AND price > (SELECT AVG(price) FROM catalog) GROUP BY author_id HAVING COUNT(*)>1)

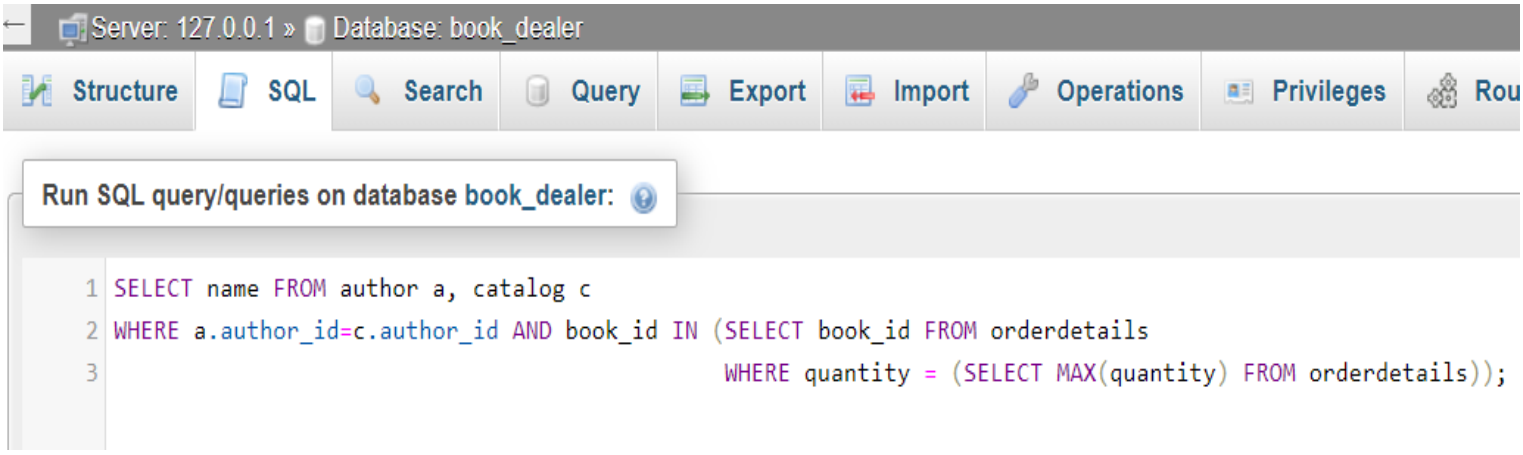


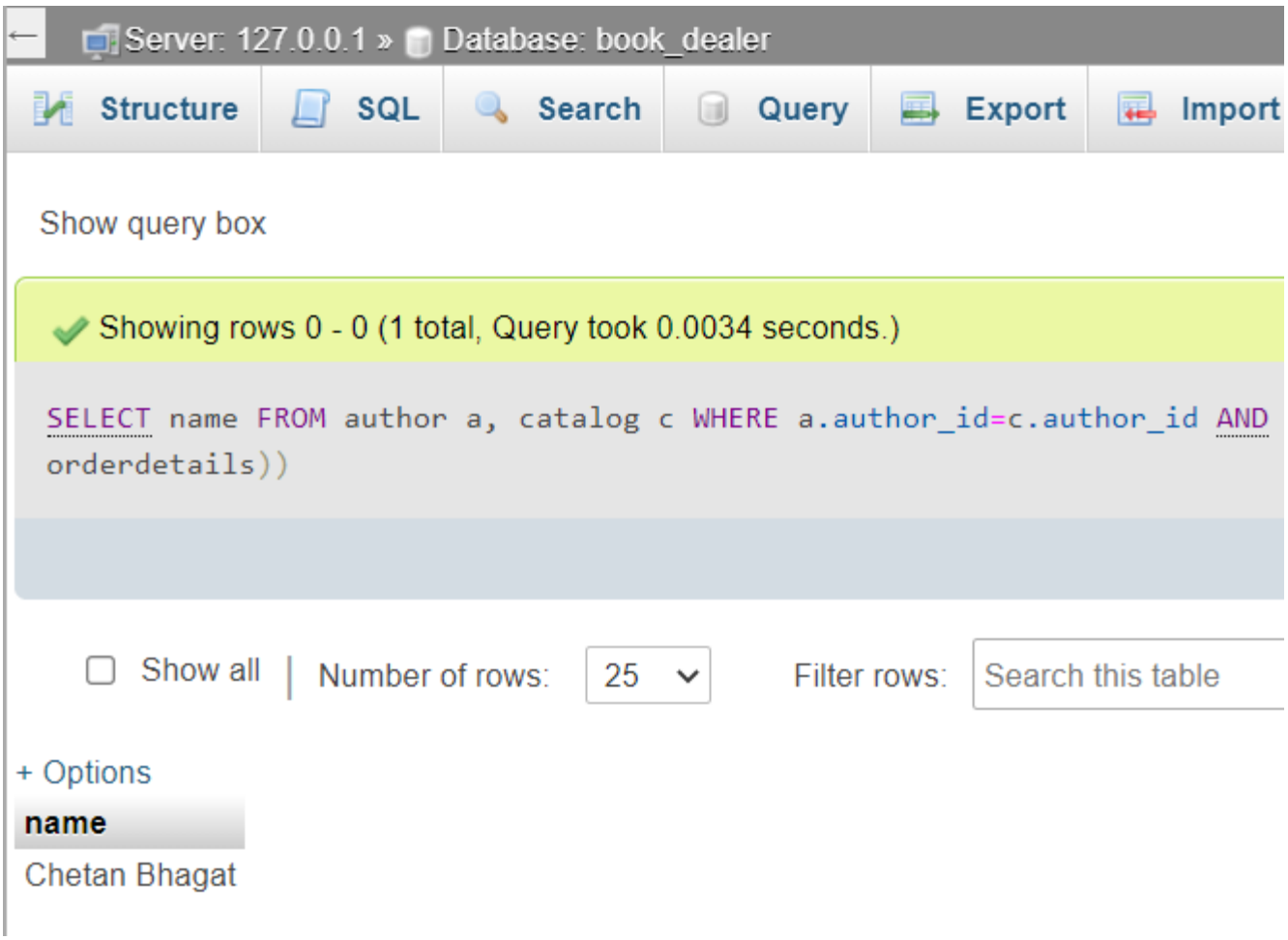


iv. Find the author of the book which has maximum sales.

Query:

SELECT name FROM author a, catalog c WHERE a.author_id=c.author_id AND book_id IN (SELECT book_id FROM orderdetails WHERE quantity = (SELECT MAX(quantity) FROM orderdetails));

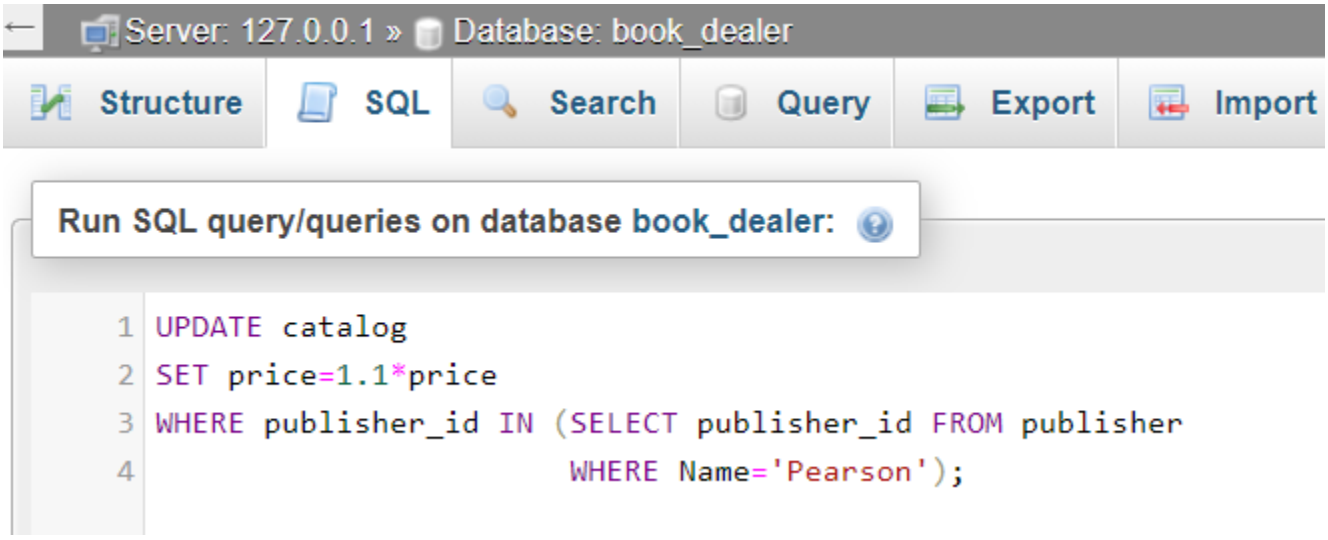


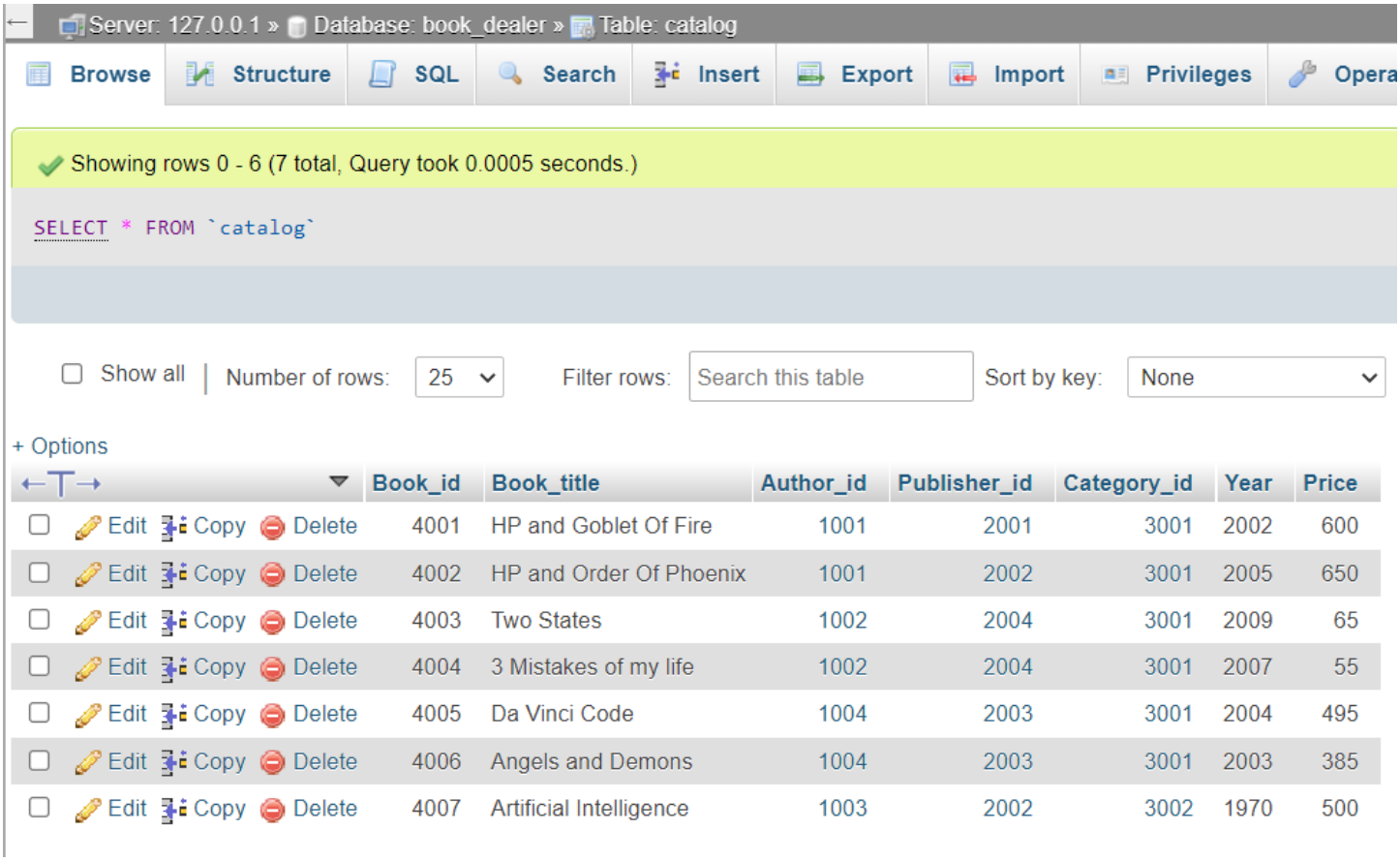


v. Demonstrate how you increase the price of books published by a specific publisher by 10%.

Query:

UPDATE catalog SET price=1.1*price WHERE publisher_id IN (SELECT publisher_id FROM publisher WHERE Name='Pearson');





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Edit Copy Delete	4006	Angels and Demons	1004	2003	3001	2003	385
Edit Copy Delete	4007	Artificial Intelligence	1003	2002	3002	1970	500