

Book Store

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In [18]: 1 #importing Libraries
2 import sqlite3 as sql
3
4 #defining book store
5 def book_store():
6     # Connect to the database or create it if it doesn't exist
7     db = sql.connect('bookstore.db')
8     cursor = db.cursor()
9
10    # Create the table with an auto-incrementing primary key
11    cursor.execute('''CREATE TABLE IF NOT EXISTS bookstore (ID INTEGER PRIMARY KEY, Title TEXT, Author TEXT, QTY INTEGER)''')
12
13    # Set the starting value of the auto-incrementing primary key
14    # Check if the table was created
15    cursor.execute("SELECT name from sqlite_master WHERE type='table'")
16    tables = cursor.fetchall()
17    if ('bookstore',) in tables:
18        print("Table 'bookstore' created successfully.")
19    else:
20        print("Error creating table 'bookstore'.")
21
22    while True:
23        #printing result on screen
24        print('''
25            add      - Add book
26            update   - Update book
27            delete   - Delete book
28            search   - Search book
29            read     - Read all information in table
30            exit     - Exit
31        ''')
32        #Reopen the connection to the database
33        cursor = db.cursor()
34        user_input = str(input().lower())
35
36        #user input add
37        if user_input == 'add':
38            #book title
39            title = input("Enter book title: ")
40            #author title
41            author = input("Enter book author: ")
42            #quantity
43            qty = int(input("Enter book quantity: "))
44            #executing sql command
45            cursor.execute("INSERT INTO bookstore(Title, Author, QTY) VALUES (?,?,?)", (title, author, qty))
46            db.commit()
47            #printing on screen
48            print("Book added to the bookstore.")
49        #user input update
50        elif user_input == 'update':
51            #old title of book to update
52            title = input("Enter book title to update: ")
53            #new title of book
54            new_title = input("Enter new book title: ")
55            #new author of book
56            new_author = input("Enter new book author: ")
57            #new qyantity
58            new_qty = int(input("Enter new book quantity: "))
59            #executing sql command
60            cursor.execute("UPDATE bookstore SET Title=?, Author=?, QTY=? WHERE Title=?", (new_title, new_author, new_qty, title))
61            db.commit()
62            #pirtinging result
63            print("Book updated in the bookstore.")
64        #user input delete
65        elif user_input == 'delete':
66            #title of book
67            title = input("Enter book title to delete: ")
68            #quantity of book
69            qty = int(input("Enter book Qty"))
70            #executing sql command
71            cursor.execute("DELETE FROM bookstore WHERE Title=? AND QTY=?", (title, qty))
72            db.commit()
73            print("Book deleted from the bookstore.")
74
75        #user input search
76        elif user_input == 'search':
77            #title of book to search
78            title = input("Enter book title to search: ")
79            #executing sql command
80            cursor.execute("SELECT * FROM bookstore WHERE Title=?", (title,))
81            book = cursor.fetchone()
82            #printing result on screen if book match
83            if book:
84                print("Title: ", book[1])
85                print("Author: ", book[2])
86                print("Quantity: ", book[3])
87            #printing result on screen if book do not match
88            else:
89                print("Book not found in the bookstore.")
90        #user input read or print all book on screen
91        elif user_input == 'read':
92            books = cursor.fetchall()
93            #executing sql command
94            cursor.execute('''SELECT id, Title, Author, Qty FROM bookstore''')
95            #printing result on screen
96            print('Printing Tables from database')
97            result = cursor.fetchall()
98            #for loop for iterating into data table and print them on screen
99            for row in result:
100                print(row)
101        #user input exit
102        elif user_input == 'exit':
103            print("Exiting program.")
104            #break while loop
105            break
106        #print if input key is wrong
107        else:
108            print("Invalid input. Try again.")
109
110    #closing database
111    db.close()
```

```
In [19]: 1 #calling function
        2 book_store()

Table 'bookstore' created successfully.

        add      - Add book
        update   - Update book
        delete   - Delete book
        search   - Search book
        read     - Read all information in table
        exit     - Exit

read
Printing Tables from database
(1, 'A Tale of Two Cities', 'Charles Dickens', 30)
(2, "Harry Potter and the Philosopher's Stone", 'J.K Rowling', 40)
(3, 'The Lion the Witch and the Wardrobe', 'C.S. Lewis', 25)
(4, 'The Lord of the Rings', 'J.R.R Tolkien', 37)
(5, 'Alice in Wonderland ', 'Lewis Carroll', 12)
(6, 'The 7 Habits of Highly Effective people', 'Stephen R.Covey', 1)

        add      - Add book
        update   - Update book
        delete   - Delete book
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        read     - Read all information in table
        exit     - Exit

add
Enter book title: Homo sapiens
Enter book author: Yuval Noah Harari
Enter book quantity: 50
Book added to the bookstore.

        add      - Add book
        update   - Update book
        delete   - Delete book
        search   - Search book
        read     - Read all information in table
        exit     - Exit

read
Printing Tables from database
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(6, 'The 7 Habits of Highly Effective people', 'Stephen R.Covey', 1)
(7, 'Homo sapiens', 'Yuval Noah Harari', 50)

        add      - Add book
        update   - Update book
        delete   - Delete book
        search   - Search book
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exit
Exiting program.
```