

**K.RAMAKRISHNAN**  
**COLLEGE OF TECHNOLOGY**  
(AN AUTONOMOUS INSTITUTION)  
**SAMAYAPURAM, TRICHY-621 112**

**Practical Record Note**

Name : MADESH A

Register Number : 2303811710421088

Subject code/name : Laboratory

Programme :

Certified that this is a bonafide record of work done by

**MADESH A** of \_\_\_\_\_

Semester in **Python Programming - I Year - II Sem - Project Module** Laboratory during the academic year 2023-2024

His/Her University Register Number is **2303811710421088**

**Staff Incharge**

**Head of the Department**

Submitted for the Practical exam held on:

**Internal Examiner**  
Date:

**External Examiner**  
Date:

**Aim:**

Project Module.

**Program:**

CTP28132.py

CodeTantra

```

class Book:
    def __init__(self, title, author, genre, price, quantity):
        self.title = title
        self.author = author
        self.genre = genre
        self.price = price
        self.quantity = quantity

class Bookstore:
    def __init__(self):
        self.inventory = {}

    def add_book(self, book):
        if book.title in self.inventory:
            self.inventory[book.title].quantity += book.quantity
        else:
            self.inventory[book.title] = book

    def delete_book(self, title):
        if title in self.inventory:
            del self.inventory[title]
            print(f"Book '{title}' deleted successfully.")
        else:
            print("Book not found in inventory.")

    def sell_book(self, title, quantity):
        if title in self.inventory:
            if self.inventory[title].quantity >= quantity:
                self.inventory[title].quantity -= quantity
                return True
            else:
                print("Insufficient quantity in stock.")
                return False
        else:
            print("Book not found in inventory.")
            return False

    def display_inventory(self):
        print("Current Inventory:")
        for book in self.inventory.values():
            print(f"Title: {book.title}, Author: {book.author}, Genre: {book.genre}, Price: {book.price}, Quantity: {book.quantity}")

    def insert_books(bookstore, books):
        for book in books:
            title, author, genre, price, quantity = book
            book_obj = Book(title, author, genre, price, quantity)
            bookstore.add_book(book_obj)

def main():
    bookstore = Bookstore()

    # Inserting initial books data
    books_data = [
        ("Python Programming", "John Doe", "Programming", 29.99, 50),
        ("Data Structures and Algorithms", "Jane Smith", "Programming", 39.99,
        30),
    ]

```

```

        ("Introduction to Machine Learning", "Alice Johnson", "Machine Learning",
49.99, 20)
    ]
insert_books(bookstore, books_data)

while True:
    print("\nWelcome to the Bookstore Management System")
    print("1. Add a book to inventory")
    print("2. Delete a book from inventory")
    print("3. Sell a book")
    print("4. Display current inventory")
    print("5. Exit")

    choice = input("Enter your choice: ")

    if choice == "1":
        title = input("Enter book title: ")
        author = input("Enter author name: ")
        genre = input("Enter genre: ")
        price = float(input("Enter price: "))
        quantity = int(input("Enter quantity: "))

        book = Book(title, author, genre, price, quantity)
        bookstore.add_book(book)
        print("Book added to inventory.")

    elif choice == "2":
        title = input("Enter book title to delete: ")
        bookstore.delete_book(title)

    elif choice == "3":
        title = input("Enter book title to sell: ")
        quantity = int(input("Enter quantity to sell: "))
        if bookstore.sell_book(title, quantity):
            print("Book sold successfully.")

    elif choice == "4":
        bookstore.display_inventory()

    elif choice == "5":
        print("Exiting...")
        break

    else:
        print("Invalid choice. Please try again.")

if __name__ == "__main__":
    main()

```

## Output:

### Test case - 1

#### User Output

Hello World

Hello World

**Result:**

Thus the above program is executed successfully and the output has been verified

CodeTantra

NAME: MADESHA

ID: 2303811710421088>

COURSE: Python Programming - I Year - II Sem - Project Module

Page No: 7