**1) Develop a full Python program to manage books:**

**View, borrow, and return books**

**Track status of books**

**Use appropriate data structures**

**Input:**

class Library:

def \_\_init\_\_(self):

self.books = {

"1984": True,

"To Kill a Mockingbird": True,

"The Great Gatsby": True,

"Pride and Prejudice": True,

"Harry Potter": True

}

def display\_books(self):

print("\nAvailable Books:")

for book, available in self.books.items():

status = "Available" if available else "Borrowed"

print(f"- {book} [{status}]")

def borrow\_book(self, title):

if title in self.books:

if self.books[title]:

self.books[title] = False

print(f"\n✅ You have borrowed '{title}'.")

else:

print(f"\n❌ Sorry, '{title}' is already borrowed.")

else:

print("\n❌ Book not found in the library.")

def return\_book(self, title):

if title in self.books:

if not self.books[title]:

self.books[title] = True

print(f"\n✅ You have returned '{title}'. Thank you!")

else:

print(f"\n⚠️ '{title}' was not borrowed.")

else:

print("\n❌ Book not found in the library.")

def main():

library = Library()

while True:

print("\n=== Library Menu ===")

print("1. View Books")

print("2. Borrow Book")

print("3. Return Book")

print("4. Exit")

choice = input("Enter your choice (1-4): ")

if choice == '1':

library.display\_books()

elif choice == '2':

book\_name = input("Enter the book title to borrow: ")

library.borrow\_book(book\_name)

elif choice == '3':

book\_name = input("Enter the book title to return: ")

library.return\_book(book\_name)

elif choice == '4':

print("Exiting Library System. Goodbye!")

break

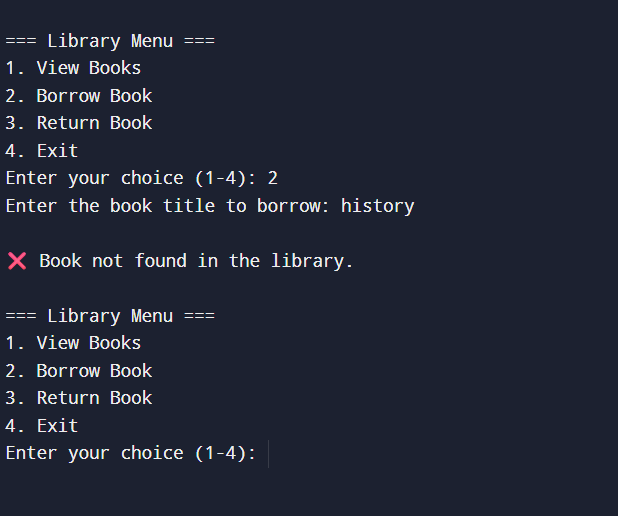
else:

print("⚠️ Invalid choice. Please try again.")

if \_\_name\_\_ == "\_\_main\_\_":

main()

**Output:**

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