Class Exercise:

Library

Exercise Description:

In this exercise, we will work with set operations to create a program that manages a library's book borrowing system. We will use sets to store the book titles that are currently borrowed by library patrons.

Your task is to write the code that allows the librarian to perform the following operations on the book borrowing system:

* Add a book to the system as being borrowed by a patron.
* Display all books currently borrowed.
* Check if a book is currently borrowed.
* Remove a book from the system once it is returned by the patron.

Once you have completed the code, test it by performing the specified operations on the book borrowing system.

# Initialize an empty set for the borrowed books

borrowed\_books = set()

# Add books to the borrowing system

# Your code here

# Display all books currently borrowed

# Your code here

# Check if a book is currently borrowed

# Your code here

# Remove a book from the system once it is returned

# Your code here

# Display the updated borrowing system

# Your code here

All Books Currently Borrowed:

Book: Python Programming, Borrowed by: John

Book: Introduction to Data Science, Borrowed by: Jane

Book: Web Development Basics, Borrowed by: Mike

Python Programming is currently borrowed.

Introduction to Data Science has been returned.

Updated Borrowing System:

Book: Python Programming, Borrowed by: John

Book: Web Development Basics, Borrowed by: Mike