Lab 11 – 20 pts

1) Name the class file "yourname_cs110_lab11_Book.py" and submit it to Canvas.
2) Name a screenshot of the outputs AND the source file of the exercise "yourname_cs110_lab11" and submit it to Canvas.
3) Name the source file "yourname_cs110_lab11.py" and submit it to Canvas.
4) All three files must be submitted.

[15 pts] Task 1

1. **[10 pts] Define a class Book to represent a book in a library with the following attributes and methods:**
    a. Attributes:
        i. title (e.g., "Harry Potter"), author (e.g., "J.K. Rowling"), copies (e.g., 5).
    b. Methods:
        i. detail_book():
            1. Prints the title, author, and the available number of copies.
        ii. borrow_book():
            1. Decrease the number of copies by 1 if copies are available.
            2. Then, print the title of the book and the remaining number of copies.
            3. If there are no remaining, then print that the book is unavailable.
        iii. return_book():
            1. Increase the number of copies by 1.
            2. Print the title of the book and the updated number of copies.
            3. If the number of available copies meets the original number of copies, print that the book is fully returned.

Grading Instructions:

- If students did not include the limits on the number of copies (e.g., having if statements, making Max or Min copies, etc.), **[-5 pts]**.
- Some students might allow negative copies of books or exceed the number of initial copies. Deduct points for these issues.

2. **[3 pts] Create two book objects:**
    a. book1: Title "1984", Author "George Orwell", Copies 3.
    b. book2: Title "The Hobbit", Author "J.R.R. Tolkien", Copies 2.

Grading Instructions:
No one would likely miss this, but if they did, deduct **[-1.5 pts for each missing object]**.

3. **[2 pts] Perform the following:**
    a. Borrow a copy of book1.
    b. Borrow a copy of book2.
    c. Borrow a copy of book2.
    d. Return a copy of book1 and borrow book2.
    e. Return one copy of book2.
    f. Find the current information about book1 and book2.

Grading Instructions:

- Students may have different wordings than in the file which is okay.
- If the available copies at the end do not match the borrow and return operations, deduct [-2 pts].

Expected Outcome:

```
1984: Successfully Check-out: Remaining copies: 2
The Hobbit: Successfully Check-out: Remaining copies: 1
The Hobbit: Successfully Check-out: Remaining copies: 0
1984: Successfully returned: Remaining copies: 3, fully returned
The Hobbit: Cannot Check-out
The Hobbit: Successfully returned: Remaining copies: 1

Details of Books:
Title: 1984, Author: George Orwell, Copies Available: 3
Title: The Hobbit, Author: J.R.R. Tolkien, Copies Available: 1
```

[5 pts] Submission

Must have three files. Code files (2 pts each) + screen shot (1 pt).

Class [10 pts]: if students did not include the limits on the number of copies (e.g., having if statements, making Max or Min copies, etc.) [-5] , Some students might have negative copies of books or exceed the number of copies than the initial copies.

Object creation [3]: no one would have missed it but if they did -1.5 for each object.

Performance [2]: students may have different wordings than in the file. That is okay. However, if the available copies at the end do not match with the borrow and return, take [-2 pts].