Technical Details

1. Everything in Stage I goes into main.py
2. Take a command line argument which is the filename, which is the command script, in your main statement. Do NOT take input! Read the file with the given filename.
3. Create a function called **hogwarts\_library()** which takes one input argument which is a string representing all the contents of command script.
4. Process the string line-by-line (Hint: split by newline character)
5. Create a variable (in modular scope) named "**book\_collection**", as a dictionary with the key being a string, book\_title, and the value a Book nametuple instance.
6. Create a function **command\_nb()** which takes in one single line of command (a string) starting with "NB" and process accordingly
7. Create a function **command\_li()** which takes in one single line of command (a string) starting with "LI" and process accordingly
8. Create a function **command\_db()** which takes in one single line of command (a string) starting with "DB" and process accordingly
9. Create a function **command\_fb()** which takes in one single line of command (a string) starting with "FB" and process accordingly
10. Create a function **command\_as()** which takes in one single line of command (a string) starting with "AS" and process accordingly
11. Create a function **command\_lm()** which takes in one single line of command (a string) starting with "LM" and process accordingly
12. Create a function **command\_pl()** which takes in one single line of command (a string) starting with "PL" and process accordingly
13. In **hogwarts\_library()**, call one of the command\_\* functions whenever a newline in command script is stepped onto
14. Add functions using the format/pattern above for other commands as needed in each stage
15. Don't be afraid to think outside the box.

Stage I

For this stage, your program will keep track of the rooms that are available. This stage implements four commands, as described below. On each command line, the first two non-whitespace characters are the command; command letters may be upper or lower case.

1. **NB** (for "Add a New Book") followed by a comma separated list of fields: title=Title,author=Author,year\_published=####,subject=Subject, section=Restricted Add a new book with the specified information. To keep the project simple, we only allow one copy of a book to present in the library.
2. **LI** (for "List Inventory"). Print a list of all books owned/maintained by the library sorted by *title*.
3. **DB** (for "Delete Book") followed by a title=Title. Print the message, "Book Not Found. Cannot be deleted." if the specified book isn't present in the library. NOTE: You will update this function again in Stages II & III.
4. **FB** (for "Find Books") followed by 0 or more of the following search criteria: title=Title,author=Author,year\_published=####,subject=Subject,section=Section. Print a list of books, sorted by title, that are owned/maintained by the library that meet the provided criteria. If 0 criteria is provided, then print all books. If no books are found matching the criteria provided, print the message, "No Books Found."
5. **AS** (for "Add Student") followed by the following fields: student\_name=Student Name, house\_name=House. Add the student to library members. If the student is already present, print "Student Name is already present."
6. **LM** (for "List Members") prints members according to each house, sorted by house and member name. If no members of a house are registered, print "No Registered Members".
7. **PL** (for "Print Line"), followed by any text. Simply print (or "echo") a line, copying the input (not counting the PL and leading whitespace) to the output. You'll find it useful in testing, and it's also a simple way to make the program's reports clearer or fancier.
8. **\*\*** Comment, followed by any text. Like comments in a program, comment lines don't have any effect on the program's behavior; they just serve as annotations in the command file.

The input file may contain any number of these commands in any order. See the sample output below for the format of the printed books list.

Below is a sample **command script** for this stage(also in Stage1Commands.txt).

\*\* This is a sample command file for the Hogwarts Library, Stage I

PL \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

PL Here is a list of available books (before adding any!)

\*\* A well-written program works gracefully with empty structures.

PL \*\* List Inventory when there are no books

LI

PL

PL \*\* Now let's add a book:

NB title=Curses and Counter-Curses,author=Vindictus Viridian,year\_published=1703,subject=Curses,section=Restricted

PL \*\* List Inventory when there is 1 book

LI

PL

\*\* And some more:

\*\* Extra blanks around the command should be ignored

Nb title=Winogrand's Wondrous Water Plants,author=Selina Sapworthy,year\_published=1970,subject=Water plants,section=Non-Restricted

PL Try adding a book that is already in inventory

Nb title=Winogrand's Wondrous Water Plants,author=Selina Sapworthy,year\_published=1970,subject=Water plants,section=Non-Restricted

PL

NB title=Ancient Runes Made Easy,author=Laurenzoo,year\_published=1992,subject=Ancient Runes,section=Non-Restricted

PL \*\* List Inventory when there are multiple books

LI

PL

PL \*\* Test deleting a book from the book collection

DB title=Winogrand's Wondrous Water Plants

PL \*\* Test Find Book with a single search parameter

FB section=Restricted

PL

\*\* Add Students to Library Members

AS student\_name=Draco Malfoy,house=Slytherin

AS student\_name=Hermione Granger,house=Gryffindor

AS student\_name=Harry Potter,house=Gryffindor

AS student\_name=Luna Lovegood,house=Ravenclaw

PL \*\* List Current Library Members

LM

PL

PL Thank you for using the Hogwarts Library Management System!

\*\* That's the end of the sample data for Stage I.

From this input file, your program should produce the following output:

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Here is a list of available books (before adding any!)

\*\* List Inventory when there are no books

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*LIBRARY INVENTORY\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Number of books available: 0

------------------------------------

\*\* Now let's add a book:

\*\* List Inventory when there is 1 book

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*LIBRARY INVENTORY\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Number of books available: 1

------------------------------------

Title: Curses and Counter-Curses

Author: Vindictus Viridian

Date: 1703

Subject: Curses

Section: Restricted

------------------------------------

Try adding a book that is already in inventory

Winogrand's Wondrous Water Plants already present.

\*\* List Inventory when there are multiple books

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*LIBRARY INVENTORY\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Number of books available: 3

------------------------------------

Title: Ancient Runes Made Easy

Author: Laurenzoo

Date: 1992

Subject: Ancient Runes

Section: Non-Restricted

------------------------------------

Title: Curses and Counter-Curses

Author: Vindictus Viridian

Date: 1703

Subject: Curses

Section: Restricted

------------------------------------

Title: Winogrand's Wondrous Water Plants

Author: Selina Sapworthy

Date: 1970

Subject: Water plants

Section: Non-Restricted

------------------------------------

\*\* Test deleting a book from the book collection

\*\* Test Find Book with a single search parameter

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*BOOK SEARCH\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Number of books found: 1

------------------------------------

Title: Curses and Counter-Curses

Author: Vindictus Viridian

Date: 1703

Subject: Curses

Section: Restricted

------------------------------------

\*\* List Current Library Members

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*LIBRARY MEMBERS\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Gryffindor:

Harry Potter

Hermione Granger

Hufflepuff:

No Registered Members

Ravenclaw:

Luna Lovegood

Slytherin:

Draco Malfoy

Thank you for using the Hogwarts Library Management System!

Stage II

Each stage of this assignment will continue to handle all the commands of the previous stages, of course. For this stage, your program will handle student requests, and deletions from the list of available books.

1. **SD** (for "Start Date") followed by a date in the following format, mm/dd/yyyy, which sets the library's current date to the date listed. The current date will serve as the basis for reports, calculating penalties, etc…
2. **CB** (for "Checkout Book") followed by the following fields: title=Title, the student's name: student\_name=Student Name, then an optional number\_of\_days=from 1 to 14 and pass\_code=PassCode for books that are Restricted. If number\_of\_days are not specified, then the default checkout period is 2 weeks. Your program will keep track of all the checkouts. Create a new checkout record for the specified book, and calculate a due\_date.  
   **NOTE:** valid pass codes to checkout books in the Restricted section are "Accio", and "Protego".
3. **CR** (for "Checkout Report") prints all the books checked out. List checked out books with title, the name of their current borrower, and their due date. Report of books checked out needs to be organized by each *school name* sorted alphabetically, then each *student name* sorted alphabetically, and each *book title* sorted alphabetically. **NOTE** that field widths may cause book titles to be truncated in this report. Field-widths can be found in the format\_string section of the file, utilities.py.
4. **LA** (for "List Available") print books, sorted by title, that are available to be checked out from the library inventory.
5. **DT** (for "Due Today") prints all the book titles & student names for books due on the current date. The report should print the the information by titles in sorted order. **NOTE** that field widths may cause book titles to be truncated in this report. Field-widths can be found in the format\_string section of the file, utilities.py.
6. **AD** (for "Advance Date") advances the current library date by one day. NOTE: You will update this in Stage III.
7. **Update command\_db()** to ensure that any checkout records/information associated with a deleted book are also removed/updated.

To make your coding task easier, import the Python library datetime and use it for date calculations. It's harder than you might think to get calculations about dates (e.g., how many days from date A to date B?) correct. The library will do it for you at the low cost of reading the documentation to see how it works. The split function with a "/" argument will be helpful, too.

Here is some sample input for this stage:

\*\* This is a sample command file for the Hogwarts Library, Stage II

\*\* Add Books to Library inventory

NB title=Hogwarts a History,author=Bathilda Bagshot,year\_published=1947,subject=Historical,section=Non-Restricted

Nb title=Winogrand's Wondrous Water Plants,author=Selina Sapworthy,year\_published=1970,subject=Water plants,section=Non-Restricted

NB title=Ancient Runes Made Easy,author=Laurenzoo,year\_published=1992,subject=Ancient Runes,section=Non-Restricted

NB title=Magick Moste Evile,author=Godelot,year\_published=1300,subject=Dark Arts,section=Restricted

NB title=Secrets of the Darkest Art,author=Owle Bullock,year\_published=1943,subject=Dark Arts,section=Restricted

NB title=Fifteenth-Century Fiends,author=Unknown,year\_published=1991,subject=Fiends,section=Non-Restricted

NB title=Basic Hexes for the Busy and Vexed,author=Unknown,year\_published=1994,subject=Hexes,section=Non-Restricted

\*\* Add Students to Library Members

AS student\_name=Draco Malfoy,house=Slytherin

AS student\_name=Hermione Granger,house=Gryffindor

AS student\_name=Harry Potter,house=Gryffindor

AS student\_name=Luna Lovegood,house=Ravenclaw

\*\* Set Current Date

SD 12 / 09 / 2020

PL \*\* Test Checking Out Books

PL \*\*\*\* Successful Checkout: Optional number\_of\_days Present

CB title=Fifteenth-Century Fiends,student\_name=Harry Potter,number\_of\_days=2

CB title=Winogrand's Wondrous Water Plants,student\_name=Hermione Granger,number\_of\_days=4

PL \*\*\*\* Successful Checkout:Optional number\_of\_days Not Present

CB title=Ancient Runes Made Easy,student\_name=Draco Malfoy

PL \*\*\*\* Checkout a Restricted Title

PL \*\*\*\*\*\* Checkout a Restricted Title: with a Valid Pass Code

CB title=Secrets of the Darkest Art,student\_name=Hermione Granger,pass\_code=Accio

cb title=Magick Moste Evile,student\_name=Draco Malfoy,pass\_code=Protego,number\_of\_days=1

PL \*\* Test Check Out Reports

\*\* Checkout Report

CR

PL

PL \*\*\*\* List books available to be Checked Out

LA

PL \*\* Test Due Today Report & Advance Date Function

DT

PL

\*\* Advance the Current Date

AD

\*\* Due Today Report

DT

PL

AD

DT

PL

AD

DT

PL

PL Thank you for using the Hogwarts Library Management System!

\*\* That' s the end of the sample data for Stage II.

For the above input, your program should produce the following output:

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Wednesday 09, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\* Test Checking Out Books

\*\*\*\* Successful Checkout: Optional number\_of\_days Present

\*\*\*\* Successful Checkout:Optional number\_of\_days Not Present

\*\*\*\* Checkout a Restricted Title

\*\*\*\*\*\* Checkout a Restricted Title: with a Valid Pass Code

\*\* Test Check Out Reports

\*\*\*CURRENT CHECKOUT REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*12/09/2020\*\*\*\*\*\*\*\*\*\*

Book Title Student Name Due Date

------------------------------------------------------------

Fifteenth-Century Fiends Harry Potter 12/11/2020

Secrets of the Darkest Art Hermione Granger 12/23/2020

Winogrand's Wondrous Water Pla Hermione Granger 12/13/2020

Ancient Runes Made Easy Draco Malfoy 12/23/2020

Magick Moste Evile Draco Malfoy 12/10/2020

\*\*\*\* List books available to be Checked Out

Number of books in available: 2

------------------------------------

Title: Basic Hexes for the Busy and Vexed

Author: Unknown

Date: 1994

Subject: Hexes

Section: Non-Restricted

------------------------------------

Title: Hogwarts a History

Author: Bathilda Bagshot

Date: 1947

Subject: Historical

Section: Non-Restricted

------------------------------------

\*\* Test Due Today Report & Advance Date Function

\*\*\*\*\*\*\*BOOKS DUE TODAY\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*12/09/2020\*\*\*\*\*\*\*\*\*\*

No books due today.

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Thursday 10, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*BOOKS DUE TODAY\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*12/10/2020\*\*\*\*\*\*\*\*\*\*

Magick Moste Evile Draco Malfoy

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Friday 11, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*BOOKS DUE TODAY\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*12/11/2020\*\*\*\*\*\*\*\*\*\*

Fifteenth-Century Fiends Harry Potter

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Saturday 12, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*BOOKS DUE TODAY\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*12/12/2020\*\*\*\*\*\*\*\*\*\*

No books due today.

Thank you for using the Hogwarts Library Management System!

Stage III

For this stage, your program will allow library members to request holds on books that are currently checked out. The first new command for this stage adds a hold request:

1. **RH** (for "Request Hold") followed by the following fields: title=Title, and the student's name: student\_name=Student Name, then an optional number\_of\_days=from 1 to 14. If number\_of\_days are not specified, then the default checkout period is 2 weeks. Add a new hold record for the specified book. Check for the following conditions and print the appropriate message: if book doesn't exist print "title not in inventory."; if student doesn't exist print "student is not a registered library member."; if book is available for checkout print "title is available to be checked out. Use command to checkout book."; if book is already checked out by this student print "student currently has checked out title."

Also handle these commands:

1. **HR** (for "Hold Requests Report"). Lists all hold requests for a given book. Print sorted by title, then the student name & number of days for each request in their position of request. Print "No Holds Requested." when there are no holds for the entire library. **NOTE** that field widths may cause book titles to be truncated in this report. Field-widths can be found in the format\_strings section of the file, utilities.py.
2. **RB** (for "Return Book"), followed by the book title, title=Title. Updates checkout records & print an error message if the specified book isn't found in inventory. An automatic checkout record should be generated for the first student who has a hold request placed for this title. If any information is missing, or the book is either not present in inventory, checkout, etc, print "Invalid Return Request for title."
3. **OR** (for "Overdue Report") prints all the book titles, student names, and days past due. The report should print the information with titles in sorted order, or "No books overdue today." when the library has no books that are overdue. **NOTE** that field widths may cause book titles to be truncated in this report. Field-widths can be found in the format\_strings section of the file, utilities.py.
4. Update **command\_ad()** to assess house late penalties each time the current date advances.
5. Update **command\_db()** to remove any holds associated with this book when the book is deleted.

It's a common temptation to use an elaborate test case like this one as the first test of your newly modified program. It's all right to indulge that temptation once, if you must; of course, your test will fail. Newly modified programs always have bugs. At that point, however, you should try a succession of smaller, more circumscribed tests, rather than ramming this same large test through the program over and over again until you finally force it through successfully. It's more productive, more thorough, and better organized in the long run to test each feature separately before going on to complex combinations. By the same token, however, adequate testing involves more than this single combination test case; this one case does not test everything that needs testing for this stage.

**NOTE:** Commands to create books & students, set the date, and checkout books are not shown, but are present in *Stage3Commands.txt*

\*\* This is a sample command file for the Hogwarts Library, Stage III

\*\* Add Books to Library inventory from Stage II Commands

\*\* Add Students to Library Members from Stage II Commands

\*\* Set Current Date from Stage II Commands

\*\* Checkout Books from Stage II Commands

PL \*\* Test Requesting a Book Hold

RH title=Ancient Runes Made Easy,student\_name=Luna Lovegood,number\_of\_days=1

RH title=Ancient Runes Made Easy,student\_name=Hermione Granger,number\_of\_days=1

RH title=Winogrand's Wondrous Water Plants,student\_name=Luna Lovegood,number\_of\_days=1

RH title=Winogrand's Wondrous Water Plants,student\_name=Draco Malfoy,number\_of\_days=1

PL \*\* Test Requesting a Book Hold for a book that is available

RH title=Hogwarts a History,student\_name=Draco Malfoy

PL \*\* Testing Book Hold Report

HR

PL

PL \*\* Testing Return Book

PL \*\*\*\* Test Returning a Book without a hold

RB title=Fifteenth-Century Fiends

PL \*\*\*\* Test Returning a Book with a hold creates new checkout

PL for first student with hold

RB title=Ancient Runes Made Easy

\*\* Checkout Report

CR

\*\* Hold Report

HR

PL

PL \*\* Testing Delete Book

PL \*\*\*\* Test Deleting a Book that is checked out & has holds

DB title=Ancient Runes Made Easy

\*\* Checkout Report

CR

\*\* Hold Report

HR

PL

PL \*\* Test Overdue Report Before Any Books are Overdue

OR

PL

PL \*\* Advancing Date to test Overdue Report

AD

AD

AD

AD

PL

PL \*\* Test Overdue Report Now that Books are Overdue

OR

PL

PL Thank you for using the Hogwarts Library Management System!

\*\* That's the end of the sample data for Stage III.

The sample input above should produce results as shown below:

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Wednesday 09, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\* Test Requesting a Book Hold

\*\* Test Requesting a Book Hold for a book that is available

Hogwarts a History is available to be checked out. Use command to checkout book.

\*\* Testing Book Hold Report

\*\*\*\*\*HOLD REQUEST REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*12/09/2020\*\*\*\*\*\*\*\*\*\*

Student Name # of Days Requested

------------------------------------------------------------

Ancient Runes Made Easy

Luna Lovegood 1

Hermione Granger 1

------------------------------------------------------------

Winogrand's Wondrous Water Plants

Luna Lovegood 1

Draco Malfoy 1

------------------------------------------------------------

\*\* Testing Return Book

\*\*\*\* Test Returning a Book without a hold

\*\*\*\* Test Returning a Book with a hold creates new checkout

for first student with hold

\*\*\*CURRENT CHECKOUT REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*12/09/2020\*\*\*\*\*\*\*\*\*\*

Book Title Student Name Due Date

------------------------------------------------------------

Secrets of the Darkest Art Hermione Granger 12/23/2020

Winogrand's Wondrous Water Pla Hermione Granger 12/13/2020

Ancient Runes Made Easy Luna Lovegood 12/10/2020

Magick Moste Evile Draco Malfoy 12/10/2020

\*\*\*\*\*HOLD REQUEST REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*12/09/2020\*\*\*\*\*\*\*\*\*\*

Student Name # of Days Requested

------------------------------------------------------------

Ancient Runes Made Easy

Hermione Granger 1

------------------------------------------------------------

Winogrand's Wondrous Water Plants

Luna Lovegood 1

Draco Malfoy 1

------------------------------------------------------------

\*\* Testing Delete Book

\*\*\*\* Test Deleting a Book that is checked out & has holds

\*\*\*CURRENT CHECKOUT REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*12/09/2020\*\*\*\*\*\*\*\*\*\*

Book Title Student Name Due Date

------------------------------------------------------------

Secrets of the Darkest Art Hermione Granger 12/23/2020

Winogrand's Wondrous Water Pla Hermione Granger 12/13/2020

Magick Moste Evile Draco Malfoy 12/10/2020

\*\*\*\*\*HOLD REQUEST REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*12/09/2020\*\*\*\*\*\*\*\*\*\*

Student Name # of Days Requested

------------------------------------------------------------

Winogrand's Wondrous Water Plants

Luna Lovegood 1

Draco Malfoy 1

------------------------------------------------------------

\*\* Test Overdue Report Before Any Books are Overdue

\*\*\*\*\*\*\*\*OVERDUE REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*12/09/2020\*\*\*\*\*\*\*# Days\*\*

No books overdue today.

\*\* Advancing Date to test Overdue Report

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Thursday 10, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Friday 11, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Saturday 12, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Sunday 13, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\* Test Overdue Report Now that Books are Overdue

\*\*\*\*\*\*\*\*OVERDUE REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*12/13/2020\*\*\*\*\*\*\*# Days\*\*

Magick Moste Evile Draco Malfoy 3

Thank you for using the Hogwarts Library Management System!

Stage IV

In this stage, your program will check each command for various inconsistencies and impossible situations.

First, your program should reject any checkout requests:

* for a student: \*\* that isn't a library member.
* for a book: \*\* that has already been checked out. \*\* that is not present in the book collection. \*\* that is restricted, and a passcode has not been provided or is incorrect.

For hold requests, your program should reject hold requests that are:

* made by a student who already has a hold request
* made by a student who isn't a registered library member

Your program must also handle deleting a book that doesn't exist, and correctly handling penalty calculations for books that are more than 6-days over due.

**PR** (for "Penalty Report") prints the point deductions for each house, sorted by house name. Then prints the penalties for individual students of that house, sorted by student name. You can assume that a student will only have one curse applied at a given time; the most severe penalty will prevail. *This is an extra credit command & tested in Test Case 47.*

Here is some sample input for this stage:

**NOTE:** Commands to create books & students, set the date, and checkout books are not shown, but are present in *Stage4Commands.txt*

\*\* This is a sample command file for the Hogwarts Library, Stage IV

\*\* Add Books to Library inventory from Stage II Commands

\*\* Add Students to Library Members from Stage II Commands

\*\* Set Current Date from Stage II Commands

\*\* Checkout Books from Stage II Commands

PL \*\*\*\* Additional Tests: Check Out

PL \*\*\*\* Try checking out a book that has already been checked out

CB title=Fifteenth-Century Fiends,student\_name=Harry Potter,number\_of\_days=2

PL \*\*\*\* Book Not Found

CB title=Basic Hexes for the Busy and Vexed,student\_name=Hermione Granger,number\_of\_days=2

PL \*\*\*\* Student Not Found

CB title=Winogrand 's Wondrous Water Plants,student\_name=Luna Lovegood,number\_of\_days=2

PL \*\*\*\*\*\* Checkout a Restricted Title: No Pass Code

CB title=Secrets of the Darkest Art,student\_name=Hermione Granger

PL \*\*\*\*\*\* Checkout a Restricted Title: Invalid Pass Code

CB title=Secrets of the Darkest Art,student\_name=Hermione Granger,pass\_code=NoAccess

PL

PL \*\*\*\* Additional Tests: Hold Requests

PL \*\* Test Requesting a Book Hold a student currently has checked out

RH title=Ancient Runes Made Easy,student\_name=Draco Malfoy

PL

PL \*\* Test Requesting a Book Hold for a book a student who already has a hold

RH title=Ancient Runes Made Easy,student\_name=Luna Lovegood,number\_of\_days=3

PL

PL \*\*\*\* Test Deleting a Book that doesn't exist

DB title=A Wizard's Guide to the Dark Web

PL

RB title=Basic Hexes for the Busy and Vexed

PL \*\* Advancing Date to >6 days Overdue Report

AD

AD

AD

AD

AD

AD

AD

PL

PL \*\* Overdue Report

OR

PL

PL

PL Thank you for using the Hogwarts Library Management System!

\*\* That's the end of the sample data for Stage IV.

The sample input above should produce results as shown below:

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Wednesday 09, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\* Additional Tests: Check Out

\*\*\*\* Try checking out a book that has already been checked out

Fifteenth-Century Fiends is currently unavailable to be checked out.

\*\*\*\* Book Not Found

\*\*\*\* Student Not Found

Winogrand 's Wondrous Water Plants not in inventory.

\*\*\*\*\*\* Checkout a Restricted Title: No Pass Code

Secrets of the Darkest Art is currently unavailable to be checked out.

\*\*\*\*\*\* Checkout a Restricted Title: Invalid Pass Code

Secrets of the Darkest Art is currently unavailable to be checked out.

\*\*\*\* Additional Tests: Hold Requests

\*\* Test Requesting a Book Hold a student currently has checked out

Draco Malfoy currently has checked out Ancient Runes Made Easy.

\*\* Test Requesting a Book Hold for a book a student who already has a hold

Luna Lovegood has already requested a hold for Ancient Runes Made Easy.

\*\*\*\* Test Deleting a Book that doesn't exist

A Wizard's Guide to the Dark Web Not Found. Cannot be deleted.

\*\* Advancing Date to >6 days Overdue Report

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Thursday 10, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Friday 11, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Saturday 12, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Sunday 13, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Monday 14, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Tuesday 15, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Wednesday 16, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\* Overdue Report

\*\*\*\*\*\*\*\*OVERDUE REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*12/16/2020\*\*\*\*\*\*\*# Days\*\*

Fifteenth-Century Fiends Harry Potter 5

Magick Moste Evile Draco Malfoy 6

Winogrand's Wondrous Water Plants Hermione Grange 3

Thank you for using the Hogwarts Library Management System!

Stage V: For this stage, your program will produce various information listings.

1. **UR** (for "User Report") followed by the student name, student\_name=Student Name. Print the user's curse, the books currently checked out(sorted by title) & their overdue status, followed by hold requests sorted by book title. If the user has no books checked out, print "No checkouts.", of if the user has no books on hold, print "No holds."
2. **DR** (for "List All Books Due Between Two Dates") followed by a start date & end date in the following format, start\_date=mm/dd/yyyy,end\_date=mm/dd/yyyy. The report should print books whose due dates are inclusive of the start & end dates. Print the book title & student name, sorted by title, of all books due between the given dates. If none are due for the given dates or the dates are invalid, print "No books due for the given dates."

Here is some sample input for this stage:

**NOTE:** Commands to create books & students, set the date, and checkout books are not shown, but are present in *Stage5Commands.txt*

\*\* This is a sample command file for the Hogwarts Library, Stage V

\*\* Add Books to Library inventory from Stage II Commands

\*\* Add Students to Library Members from Stage II Commands

\*\* Set Current Date from Stage II Commands

\*\* Checkout Books from Stage II Commands

\*\* Requesting Book Holds from Stage III Commands

PL \*\* Advancing Date to test Overdue Report

AD

AD

AD

AD

PL

PL \*\* Testing a User Report

UR student\_name=Hermione Granger

PL

PL \*\* Testing a Due Between Report

DR start\_date=01/01/1982,end\_date=01/02/1982

PL

DR start\_date=12/02/2020,end\_date=12/10/2020

PL

PL \*\* Testing a Due Between Report where the Start Date is AFTER the End Date

DR start\_date=01/02/1983,end\_date=01/01/1982

PL

PL

PL \*\* Testing a User Report for a Non-Library Member

UR student\_name=Ron Weasley

PL

PL Thank you for using the Hogwarts Library Management System!

\*\* That's the end of the sample data for Stage V.

The sample input above should produce results as shown below:

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Wednesday 09, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\* Advancing Date to test Overdue Report

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Thursday 10, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Friday 11, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Saturday 12, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Sunday 13, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Monday 14, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\* Testing a User Report

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*USER REPORT for Hermione Granger\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Hermione Granger Curse: Ear-Shrivelling

-------------------------CHECKOUTS--------------------------

Secrets of the Darkest Art 12/23/2020

Winogrand's Wondrous Water Plants 12/13/2020

---------------------------HOLDS----------------------------

Ancient Runes Made Easy 1

\*\* Testing a Due Between Report

\*\*\*BOOKS DUE BETWEEN\*\*\*\*\*\*\*\*01/01/1982 to 01/02/1982\*\*\*\*\*\*\*\*

No books due for the given dates.

\*\*\*BOOKS DUE BETWEEN\*\*\*\*\*\*\*\*12/02/2020 to 12/10/2020\*\*\*\*\*\*\*\*

Magick Moste Evile Draco Malfoy

\*\* Testing a Due Between Report where the Start Date is AFTER the End Date

\*\*\*BOOKS DUE BETWEEN\*\*\*\*\*\*\*\*01/02/1983 to 01/01/1982\*\*\*\*\*\*\*\*

No books due for the given dates.

\*\* Testing a User Report for a Non-Library Member

Ron Weasley is not a registered member of the library.

Thank you for using the Hogwarts Library Management System!

Sample Library Structures:

You may, or may not find the following structures helpful. Feel free to use any of the definitions below:

**Book**

* title: str
* author: str
* year\_published: int
* subject: str
* section: Non-Restricted, Restricted(Requires a pass code)

Book = namedtuple('Book', 'title author year\_published subject section')

curses = Book("Curses and Counter-Curses", "Vindictus Viridian", 1703, "Curses", "Restricted")

**Student** Stores information about a student/library member

* name: string
* checked\_out\_books: [Book]
* house: "Gryffindor", "Hufflepuff", "Slytherin", or "Ravenclaw"

Student = namedtuple('Student', 'student\_name house checked\_out\_books')

harry\_potter = Student("Harry Potter", [curses], "Gryffindor")

**Checkout Record** Stores information about a book that has been checked out

* book: Book
* member: Student
* due\_date: datetime.date  
  See the following for more documentation on datetime: https://docs.python.org/3/library/datetime.html#datetime.datetime

Checkout = namedtuple('Checkout', 'book student due\_date')

curse\_checkout = Checkout(curses, harry\_potter, datetime.date(year=1991, month=9, day=3))

**Penalties**

* curse: str
* point\_deduction: int

Penalty = namedtuple('Penalty', 'curse point\_deduction')

one\_day\_penalty = Penalty("Ear-Shrivelling", 10)

# Define a Container of the total number of penalty points for every house

house\_penalties = {"Gryffindor": 0, "Hufflepuff": 0, "Ravenclaw": 0, "Slytherin": 0}

**Format Strings**  
Formatting strings for various reports. The width for most output is set to 60-characters

due\_today\_format\_string = "{title:<35}{name:>25}"

due\_report\_format\_string = "{title:<35}{name:>25}"

checkout\_report\_format\_string = "{title:<30}{name:^20}{due\_date:>10}"

user\_report\_format\_string = "{title:<35}{due\_date:>25}"

hold\_report\_format\_string = "{name:<33}{number\_of\_days:^27}"

Sample code can also be found here: <https://onlinegdb.com/rknvP0RsD>

1: Stage I Commands Example

0 / 1

Traceback (most recent call last):

File "main.py", line 4, in <module>

from namedtuple import Book

ModuleNotFoundError: No module named 'namedtuple'

Run command

python3 main.py Stage1Commands.txt

Your output

*Your program produced no output*

Expected output

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Here is a list of available books (before adding any!)

\*\* List Inventory when there are no books

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*LIBRARY INVENTORY\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Number of books available: 0

------------------------------------

\*\* Now let's add a book:

\*\* List Inventory when there is 1 book

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*LIBRARY INVENTORY\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Number of books available: 1

------------------------------------

Title: Curses and Counter-Curses

Author: Vindictus Viridian

Date: 1703

Subject: Curses

Section: Restricted

------------------------------------

Try adding a book that is already in inventory

Winogrand's Wondrous Water Plants already present.

\*\* List Inventory when there are multiple books

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*LIBRARY INVENTORY\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Number of books available: 3

------------------------------------

Title: Ancient Runes Made Easy

Author: Laurenzoo

Date: 1992

Subject: Ancient Runes

Section: Non-Restricted

------------------------------------

Title: Curses and Counter-Curses

Author: Vindictus Viridian

Date: 1703

Subject: Curses

Section: Restricted

------------------------------------

Title: Winogrand's Wondrous Water Plants

Author: Selina Sapworthy

Date: 1970

Subject: Water plants

Section: Non-Restricted

------------------------------------

\*\* Test deleting a book from the book collection

\*\* Test Find Book with a single search parameter

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*BOOK SEARCH\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Number of books found: 1

------------------------------------

Title: Curses and Counter-Curses

Author: Vindictus Viridian

Date: 1703

Subject: Curses

Section: Restricted

------------------------------------

\*\* List Current Library Members

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*LIBRARY MEMBERS\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Gryffindor:

Harry Potter

Hermione Granger

Hufflepuff:

No Registered Members

Ravenclaw:

Luna Lovegood

Slytherin:

Draco Malfoy

Thank you for using the Hogwarts Library Management System!

2: Stage 2 Commands Example

0 / 1

Traceback (most recent call last):

File "main.py", line 4, in <module>

from namedtuple import Book

ModuleNotFoundError: No module named 'namedtuple'

Run command

python3 main.py Stage2Commands.txt

Your output

*Your program produced no output*

Expected output

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Wednesday 09, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\* Test Checking Out Books

\*\*\*\* Successful Checkout: Optional number\_of\_days Present

\*\*\*\* Successful Checkout:Optional number\_of\_days Not Present

\*\*\*\* Checkout a Restricted Title

\*\*\*\*\*\* Checkout a Restricted Title: with a Valid Pass Code

\*\* Test Check Out Reports

\*\*\*CURRENT CHECKOUT REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*12/09/2020\*\*\*\*\*\*\*\*\*\*

Book Title Student Name Due Date

------------------------------------------------------------

Fifteenth-Century Fiends Harry Potter 12/11/2020

Secrets of the Darkest Art Hermione Granger 12/23/2020

Winogrand's Wondrous Water Pla Hermione Granger 12/13/2020

Ancient Runes Made Easy Draco Malfoy 12/23/2020

Magick Moste Evile Draco Malfoy 12/10/2020

\*\*\*\* List books available to be Checked Out

Number of books in available: 2

------------------------------------

Title: Basic Hexes for the Busy and Vexed

Author: Unknown

Date: 1994

Subject: Hexes

Section: Non-Restricted

------------------------------------

Title: Hogwarts a History

Author: Bathilda Bagshot

Date: 1947

Subject: Historical

Section: Non-Restricted

------------------------------------

\*\* Test Due Today Report & Advance Date Function

\*\*\*\*\*\*\*BOOKS DUE TODAY\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*12/09/2020\*\*\*\*\*\*\*\*\*\*

No books due today.

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Thursday 10, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*BOOKS DUE TODAY\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*12/10/2020\*\*\*\*\*\*\*\*\*\*

Magick Moste Evile Draco Malfoy

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Friday 11, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*BOOKS DUE TODAY\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*12/11/2020\*\*\*\*\*\*\*\*\*\*

Fifteenth-Century Fiends Harry Potter

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Saturday 12, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*BOOKS DUE TODAY\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*12/12/2020\*\*\*\*\*\*\*\*\*\*

No books due today.

Thank you for using the Hogwarts Library Management System!

3: Stage 3 Commands Example

0 / 1

Traceback (most recent call last):

File "main.py", line 4, in <module>

from namedtuple import Book

ModuleNotFoundError: No module named 'namedtuple'

Run command

python3 main.py Stage3Commands.txt

Your output

*Your program produced no output*

Expected output

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Wednesday 09, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\* Test Requesting a Book Hold

\*\* Test Requesting a Book Hold for a book that is available

Hogwarts a History is available to be checked out. Use command to checkout book.

\*\* Testing Book Hold Report

\*\*\*\*\*HOLD REQUEST REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*12/09/2020\*\*\*\*\*\*\*\*\*\*

Student Name # of Days Requested

------------------------------------------------------------

Ancient Runes Made Easy

Luna Lovegood 1

Hermione Granger 1

------------------------------------------------------------

Winogrand's Wondrous Water Plants

Luna Lovegood 1

Draco Malfoy 1

------------------------------------------------------------

\*\* Testing Return Book

\*\*\*\* Test Returning a Book without a hold

\*\*\*\* Test Returning a Book with a hold creates new checkout

for first student with hold

\*\*\*CURRENT CHECKOUT REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*12/09/2020\*\*\*\*\*\*\*\*\*\*

Book Title Student Name Due Date

------------------------------------------------------------

Secrets of the Darkest Art Hermione Granger 12/23/2020

Winogrand's Wondrous Water Pla Hermione Granger 12/13/2020

Ancient Runes Made Easy Luna Lovegood 12/10/2020

Magick Moste Evile Draco Malfoy 12/10/2020

\*\*\*\*\*HOLD REQUEST REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*12/09/2020\*\*\*\*\*\*\*\*\*\*

Student Name # of Days Requested

------------------------------------------------------------

Ancient Runes Made Easy

Hermione Granger 1

------------------------------------------------------------

Winogrand's Wondrous Water Plants

Luna Lovegood 1

Draco Malfoy 1

------------------------------------------------------------

\*\* Testing Delete Book

\*\*\*\* Test Deleting a Book that is checked out & has holds

\*\*\*CURRENT CHECKOUT REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*12/09/2020\*\*\*\*\*\*\*\*\*\*

Book Title Student Name Due Date

------------------------------------------------------------

Secrets of the Darkest Art Hermione Granger 12/23/2020

Winogrand's Wondrous Water Pla Hermione Granger 12/13/2020

Magick Moste Evile Draco Malfoy 12/10/2020

\*\*\*\*\*HOLD REQUEST REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*12/09/2020\*\*\*\*\*\*\*\*\*\*

Student Name # of Days Requested

------------------------------------------------------------

Winogrand's Wondrous Water Plants

Luna Lovegood 1

Draco Malfoy 1

------------------------------------------------------------

\*\* Test Overdue Report Before Any Books are Overdue

\*\*\*\*\*\*\*\*OVERDUE REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*12/09/2020\*\*\*\*\*\*\*# Days\*\*

No books overdue today.

\*\* Advancing Date to test Overdue Report

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Thursday 10, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Friday 11, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Saturday 12, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Sunday 13, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\* Test Overdue Report Now that Books are Overdue

\*\*\*\*\*\*\*\*OVERDUE REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*12/13/2020\*\*\*\*\*\*\*# Days\*\*

Magick Moste Evile Draco Malfoy 3

Thank you for using the Hogwarts Library Management System!

4: Stage 4 Commands Example

0 / 1

Traceback (most recent call last):

File "main.py", line 4, in <module>

from namedtuple import Book

ModuleNotFoundError: No module named 'namedtuple'

Run command

python3 main.py Stage4Commands.txt

Your output

*Your program produced no output*

Expected output

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Wednesday 09, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\* Additional Tests: Check Out

\*\*\*\* Try checking out a book that has already been checked out

Fifteenth-Century Fiends is currently unavailable to be checked out.

\*\*\*\* Book Not Found

\*\*\*\* Student Not Found

Winogrand 's Wondrous Water Plants not in inventory.

\*\*\*\*\*\* Checkout a Restricted Title: No Pass Code

Secrets of the Darkest Art is currently unavailable to be checked out.

\*\*\*\*\*\* Checkout a Restricted Title: Invalid Pass Code

Secrets of the Darkest Art is currently unavailable to be checked out.

\*\*\*\* Additional Tests: Hold Requests

\*\* Test Requesting a Book Hold a student currently has checked out

Draco Malfoy currently has checked out Ancient Runes Made Easy.

\*\* Test Requesting a Book Hold for a book a student who already has a hold

Luna Lovegood has already requested a hold for Ancient Runes Made Easy.

\*\*\*\* Test Deleting a Book that doesn't exist

A Wizard's Guide to the Dark Web Not Found. Cannot be deleted.

\*\*\*CURRENT CHECKOUT REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*12/09/2020\*\*\*\*\*\*\*\*\*\*

Book Title Student Name Due Date

------------------------------------------------------------

Fifteenth-Century Fiends Harry Potter 12/11/2020

Secrets of the Darkest Art Hermione Granger 12/23/2020

Winogrand's Wondrous Water Pla Hermione Granger 12/13/2020

Ancient Runes Made Easy Draco Malfoy 12/23/2020

Magick Moste Evile Draco Malfoy 12/10/2020

\*\* Advancing Date to >6 days Overdue Report

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Thursday 10, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*PENALTY REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*12/10/2020\*\*\*\*\*\*\*\*\*\*

Gryffindor Point Deductions: 0

Hufflepuff Point Deductions: 0

Ravenclaw Point Deductions: 0

Slytherin Point Deductions: 0

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Friday 11, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*PENALTY REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*12/11/2020\*\*\*\*\*\*\*\*\*\*

Gryffindor Point Deductions: 0

Hufflepuff Point Deductions: 0

Ravenclaw Point Deductions: 0

Slytherin Point Deductions: 10

Draco Malfoy Curse: Ear-Shrivelling

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Saturday 12, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*PENALTY REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*12/12/2020\*\*\*\*\*\*\*\*\*\*

Gryffindor Point Deductions: 10

Harry Potter Curse: Ear-Shrivelling

Hufflepuff Point Deductions: 0

Ravenclaw Point Deductions: 0

Slytherin Point Deductions: 30

Draco Malfoy Curse: Hair Loss

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Sunday 13, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*PENALTY REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*12/13/2020\*\*\*\*\*\*\*\*\*\*

Gryffindor Point Deductions: 30

Harry Potter Curse: Hair Loss

Hufflepuff Point Deductions: 0

Ravenclaw Point Deductions: 0

Slytherin Point Deductions: 60

Draco Malfoy Curse: Curse of the Bogies

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Monday 14, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*PENALTY REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*12/14/2020\*\*\*\*\*\*\*\*\*\*

Gryffindor Point Deductions: 70

Harry Potter Curse: Curse of the Bogies

Hermione Granger Curse: Ear-Shrivelling

Hufflepuff Point Deductions: 0

Ravenclaw Point Deductions: 0

Slytherin Point Deductions: 110

Draco Malfoy Curse: Slug-Vomiting

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Tuesday 15, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*PENALTY REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*12/15/2020\*\*\*\*\*\*\*\*\*\*

Gryffindor Point Deductions: 140

Harry Potter Curse: Slug-Vomiting

Hermione Granger Curse: Hair Loss

Hufflepuff Point Deductions: 0

Ravenclaw Point Deductions: 0

Slytherin Point Deductions: 190

Draco Malfoy Curse: Book Return

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Wednesday 16, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\* Overdue Report

\*\*\*\*\*\*\*\*OVERDUE REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*12/16/2020\*\*\*\*\*\*\*# Days\*\*

Fifteenth-Century Fiends Harry Potter 5

Magick Moste Evile Draco Malfoy 6

Winogrand's Wondrous Water Plants Hermione Grange 3

Thank you for using the Hogwarts Library Management System!

5: Stage 5 Commands Example

0 / 1

Traceback (most recent call last):

File "main.py", line 4, in <module>

from namedtuple import Book

ModuleNotFoundError: No module named 'namedtuple'

Run command

python3 main.py Stage5Commands.txt

Your output

*Your program produced no output*

Expected output

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Wednesday 09, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\* Advancing Date to test Overdue Report

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Thursday 10, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Friday 11, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Saturday 12, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Sunday 13, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Monday 14, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\* Testing a User Report

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*USER REPORT for Hermione Granger\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Hermione Granger Curse: Ear-Shrivelling

-------------------------CHECKOUTS--------------------------

Secrets of the Darkest Art 12/23/2020

Winogrand's Wondrous Water Plants 12/13/2020

---------------------------HOLDS----------------------------

Ancient Runes Made Easy 1

\*\* Testing a Due Between Report

\*\*\*BOOKS DUE BETWEEN\*\*\*\*\*\*\*\*01/01/1982 to 01/02/1982\*\*\*\*\*\*\*\*

No books due for the given dates.

\*\*\*BOOKS DUE BETWEEN\*\*\*\*\*\*\*\*12/02/2020 to 12/10/2020\*\*\*\*\*\*\*\*

Magick Moste Evile Draco Malfoy

\*\* Testing a Due Between Report where the Start Date is AFTER the End Date

\*\*\*BOOKS DUE BETWEEN\*\*\*\*\*\*\*\*01/02/1983 to 01/01/1982\*\*\*\*\*\*\*\*

No books due for the given dates.

\*\* Testing a User Report for a Non-Library Member

Ron Weasley is not a registered member of the library.

Thank you for using the Hogwarts Library Management System!

6: Stage1\_NB\_AS.txt

0 / 4

Traceback (most recent call last):

File "main.py", line 4, in <module>

from namedtuple import Book

ModuleNotFoundError: No module named 'namedtuple'

Run command

python3 main.py Stage1\_NB\_AS.txt

Output results hidden by your instructor

7: Stage1\_FB\_0SearchField.txt

0 / 1

Traceback (most recent call last):

File "main.py", line 4, in <module>

from namedtuple import Book

ModuleNotFoundError: No module named 'namedtuple'

Run command

python3 main.py Stage1\_FB\_0SearchField.txt

Your output

*Your program produced no output*

Expected output

\*\* 5 books

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*LIBRARY INVENTORY\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Number of books available: 5

------------------------------------

Title: A

Author: B

Date: 2020

Subject: C

Section: Restricted

------------------------------------

Title: B

Author: B

Date: 2019

Subject: C

Section: Restricted

------------------------------------

Title: C

Author: B

Date: 2020

Subject: G

Section: Restricted

------------------------------------

Title: D

Author: F

Date: 2019

Subject: C

Section: Restricted

------------------------------------

Title: E

Author: F

Date: 2020

Subject: G

Section: Non-Restricted

------------------------------------

\*\* find all books

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*BOOK SEARCH\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Number of books found: 5

------------------------------------

Title: A

Author: B

Date: 2020

Subject: C

Section: Restricted

------------------------------------

Title: B

Author: B

Date: 2019

Subject: C

Section: Restricted

------------------------------------

Title: C

Author: B

Date: 2020

Subject: G

Section: Restricted

------------------------------------

Title: D

Author: F

Date: 2019

Subject: C

Section: Restricted

------------------------------------

Title: E

Author: F

Date: 2020

Subject: G

Section: Non-Restricted

------------------------------------

8: Stage1\_FB\_1SearchField.txt

0 / 2

Traceback (most recent call last):

File "main.py", line 4, in <module>

from namedtuple import Book

ModuleNotFoundError: No module named 'namedtuple'

Run command

python3 main.py Stage1\_FB\_1SearchField.txt

Output results hidden by your instructor

9: Stage1\_FB\_2SearchFields.txt

0 / 1

Traceback (most recent call last):

File "main.py", line 4, in <module>

from namedtuple import Book

ModuleNotFoundError: No module named 'namedtuple'

Run command

python3 main.py Stage1\_FB\_2SearchFields.txt

Your output

*Your program produced no output*

Expected output

test lower case & spaced command line

\*\* 5 books

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*LIBRARY INVENTORY\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Number of books available: 5

------------------------------------

Title: A

Author: B

Date: 2020

Subject: C

Section: Restricted

------------------------------------

Title: B

Author: B

Date: 2019

Subject: C

Section: Restricted

------------------------------------

Title: C

Author: B

Date: 2020

Subject: G

Section: Restricted

------------------------------------

Title: D

Author: F

Date: 2019

Subject: C

Section: Restricted

------------------------------------

Title: E

Author: F

Date: 2020

Subject: G

Section: Non-Restricted

------------------------------------

\*\* find 2 books: A, C

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*BOOK SEARCH\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Number of books found: 2

------------------------------------

Title: A

Author: B

Date: 2020

Subject: C

Section: Restricted

------------------------------------

Title: C

Author: B

Date: 2020

Subject: G

Section: Restricted

------------------------------------

\*\* find 2 books: C, E

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*BOOK SEARCH\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Number of books found: 2

------------------------------------

Title: C

Author: B

Date: 2020

Subject: G

Section: Restricted

------------------------------------

Title: E

Author: F

Date: 2020

Subject: G

Section: Non-Restricted

------------------------------------

10: Stage1\_DB\_LI\_LM.txt

0 / 2

Traceback (most recent call last):

File "main.py", line 4, in <module>

from namedtuple import Book

ModuleNotFoundError: No module named 'namedtuple'

Run command

python3 main.py Stage1\_DB\_LI\_LM.txt

Output results hidden by your instructor

11: Stage1Complete.txt(See Stage1Complete.out for expected output)

0 / 4

Traceback (most recent call last):

File "main.py", line 4, in <module>

from namedtuple import Book

ModuleNotFoundError: No module named 'namedtuple'

Run command

python3 main.py Stage1Complete.txt

Output results hidden by your instructor

12: Stage2\_CB\_CR\_LA.txt

0 / 1

Traceback (most recent call last):

File "main.py", line 4, in <module>

from namedtuple import Book

ModuleNotFoundError: No module named 'namedtuple'

Run command

python3 main.py Stage2\_CB\_CR\_LA.txt

Your output

*Your program produced no output*

Expected output

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Friday 01, January 2021\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*CURRENT CHECKOUT REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*01/01/2021\*\*\*\*\*\*\*\*\*\*

Book Title Student Name Due Date

------------------------------------------------------------

A Z 01/05/2021

\*\*\*\* List books available to be Checked Out

Number of books in available: 4

------------------------------------

Title: B

Author: B

Date: 2019

Subject: C

Section: Non-Restricted

------------------------------------

Title: C

Author: B

Date: 2020

Subject: G

Section: Non-Restricted

------------------------------------

Title: D

Author: F

Date: 2019

Subject: C

Section: Non-Restricted

------------------------------------

Title: E

Author: F

Date: 2020

Subject: G

Section: Non-Restricted

------------------------------------

\*\*\*CURRENT CHECKOUT REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*01/01/2021\*\*\*\*\*\*\*\*\*\*

Book Title Student Name Due Date

------------------------------------------------------------

A Z 01/05/2021

B Z 01/04/2021

C Z 01/03/2021

D Z 01/02/2021

E Z 01/15/2021

\*\*\*\* List books available to be Checked Out

Number of books in available: 0

------------------------------------

13: Stage2\_CB\_Errors.txt

0 / 1

Traceback (most recent call last):

File "main.py", line 4, in <module>

from namedtuple import Book

ModuleNotFoundError: No module named 'namedtuple'

Run command

python3 main.py Stage2\_CB\_Errors.txt

Your output

*Your program produced no output*

Expected output

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Friday 01, January 2021\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*missing pass code

A is a Restricted book, and requires a pass code to be checked out.

\*\*invalid student

L is not a registered library member.

\*\*invalid title

L not in inventory.

\*\*already checked out

A is currently unavailable to be checked out.

\*\*\*\* List books available to be Checked Out

Number of books in available: 3

------------------------------------

Title: C

Author: B

Date: 2020

Subject: G

Section: Non-Restricted

------------------------------------

Title: D

Author: F

Date: 2019

Subject: C

Section: Non-Restricted

------------------------------------

Title: E

Author: F

Date: 2020

Subject: G

Section: Non-Restricted

------------------------------------

\*\*\*CURRENT CHECKOUT REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*01/01/2021\*\*\*\*\*\*\*\*\*\*

Book Title Student Name Due Date

------------------------------------------------------------

A Z 01/05/2021

B Z 01/04/2021

14: Stage2\_SD\_AD.txt

0 / 1

Traceback (most recent call last):

File "main.py", line 4, in <module>

from namedtuple import Book

ModuleNotFoundError: No module named 'namedtuple'

Run command

python3 main.py Stage2\_SD\_AD.txt

Your output

*Your program produced no output*

Expected output

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Friday 01, January 2021\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Saturday 02, January 2021\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Sunday 03, January 2021\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Monday 04, January 2021\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Tuesday 05, January 2021\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

15: Stage2AD\_CR\_DT.txt

0 / 1

Traceback (most recent call last):

File "main.py", line 4, in <module>

from namedtuple import Book

ModuleNotFoundError: No module named 'namedtuple'

Run command

python3 main.py Stage2AD\_CR\_DT.txt

Your output

*Your program produced no output*

Expected output

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Friday 01, January 2021\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

V is already present.

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Saturday 02, January 2021\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*CURRENT CHECKOUT REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*01/02/2021\*\*\*\*\*\*\*\*\*\*

Book Title Student Name Due Date

------------------------------------------------------------

A Z 01/05/2021

B Z 01/04/2021

C Z 01/03/2021

D Z 01/02/2021

E Z 01/15/2021

\*\*\*\*\*\*\*BOOKS DUE TODAY\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*01/02/2021\*\*\*\*\*\*\*\*\*\*

D Z

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Sunday 03, January 2021\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*CURRENT CHECKOUT REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*01/03/2021\*\*\*\*\*\*\*\*\*\*

Book Title Student Name Due Date

------------------------------------------------------------

A Z 01/05/2021

B Z 01/04/2021

C Z 01/03/2021

D Z 01/02/2021

E Z 01/15/2021

\*\*\*\*\*\*\*BOOKS DUE TODAY\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*01/03/2021\*\*\*\*\*\*\*\*\*\*

C Z

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Monday 04, January 2021\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*CURRENT CHECKOUT REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*01/04/2021\*\*\*\*\*\*\*\*\*\*

Book Title Student Name Due Date

------------------------------------------------------------

A Z 01/05/2021

B Z 01/04/2021

C Z 01/03/2021

D Z 01/02/2021

E Z 01/15/2021

\*\*\*\*\*\*\*BOOKS DUE TODAY\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*01/04/2021\*\*\*\*\*\*\*\*\*\*

B Z

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Tuesday 05, January 2021\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*CURRENT CHECKOUT REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*01/05/2021\*\*\*\*\*\*\*\*\*\*

Book Title Student Name Due Date

------------------------------------------------------------

A Z 01/05/2021

B Z 01/04/2021

C Z 01/03/2021

D Z 01/02/2021

E Z 01/15/2021

\*\*\*\*\*\*\*BOOKS DUE TODAY\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*01/05/2021\*\*\*\*\*\*\*\*\*\*

A Z

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Wednesday 06, January 2021\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*CURRENT CHECKOUT REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*01/06/2021\*\*\*\*\*\*\*\*\*\*

Book Title Student Name Due Date

------------------------------------------------------------

A Z 01/05/2021

B Z 01/04/2021

C Z 01/03/2021

D Z 01/02/2021

E Z 01/15/2021

\*\*\*\*\*\*\*BOOKS DUE TODAY\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*01/06/2021\*\*\*\*\*\*\*\*\*\*

No books due today.

16: Stage2DB\_CR\_LA.txt

0 / 1

Traceback (most recent call last):

File "main.py", line 4, in <module>

from namedtuple import Book

ModuleNotFoundError: No module named 'namedtuple'

Run command

python3 main.py Stage2DB\_CR\_LA.txt

Your output

*Your program produced no output*

Expected output

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Friday 01, January 2021\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*CURRENT CHECKOUT REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*01/01/2021\*\*\*\*\*\*\*\*\*\*

No Books Checked Out.

Book Title Student Name Due Date

------------------------------------------------------------

\*\*\*CURRENT CHECKOUT REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*01/01/2021\*\*\*\*\*\*\*\*\*\*

Book Title Student Name Due Date

------------------------------------------------------------

A Z 01/05/2021

B Z 01/04/2021

C Z 01/03/2021

E Z 01/15/2021

\*\*\*CURRENT CHECKOUT REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*01/01/2021\*\*\*\*\*\*\*\*\*\*

Book Title Student Name Due Date

------------------------------------------------------------

B Z 01/04/2021

C Z 01/03/2021

E Z 01/15/2021

\*\*\*\* List books available to be Checked Out

Number of books in available: 1

------------------------------------

Title: D

Author: F

Date: 2019

Subject: C

Section: Non-Restricted

------------------------------------

\*\*\*CURRENT CHECKOUT REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*01/01/2021\*\*\*\*\*\*\*\*\*\*

Book Title Student Name Due Date

------------------------------------------------------------

B Z 01/04/2021

E Z 01/15/2021

\*\*\*\* List books available to be Checked Out

Number of books in available: 1

------------------------------------

Title: D

Author: F

Date: 2019

Subject: C

Section: Non-Restricted

------------------------------------

\*\*\*CURRENT CHECKOUT REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*01/01/2021\*\*\*\*\*\*\*\*\*\*

Book Title Student Name Due Date

------------------------------------------------------------

E Z 01/15/2021

\*\*\*\* List books available to be Checked Out

Number of books in available: 0

------------------------------------

\*\*\*CURRENT CHECKOUT REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*01/01/2021\*\*\*\*\*\*\*\*\*\*

No Books Checked Out.

Book Title Student Name Due Date

------------------------------------------------------------

\*\*\*\* List books available to be Checked Out

Number of books in available: 0

------------------------------------

17: Stage2Complete.txt(See Stage2Complete.out for output)

0 / 4

Traceback (most recent call last):

File "main.py", line 4, in <module>

from namedtuple import Book

ModuleNotFoundError: No module named 'namedtuple'

Run command

python3 main.py Stage2Complete.txt

Output results hidden by your instructor

18: Stage3\_CB\_RB.txt

0 / 1

Traceback (most recent call last):

File "main.py", line 4, in <module>

from namedtuple import Book

ModuleNotFoundError: No module named 'namedtuple'

Run command

python3 main.py Stage3\_CB\_RB.txt

Your output

*Your program produced no output*

Expected output

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Friday 01, January 2021\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*CURRENT CHECKOUT REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*01/01/2021\*\*\*\*\*\*\*\*\*\*

Book Title Student Name Due Date

------------------------------------------------------------

A Z 01/05/2021

B Z 01/04/2021

C Z 01/03/2021

E Z 01/15/2021

Number of books in available: 1

------------------------------------

Title: D

Author: F

Date: 2019

Subject: C

Section: Non-Restricted

------------------------------------

\*\* Return E

Number of books in available: 2

------------------------------------

Title: D

Author: F

Date: 2019

Subject: C

Section: Non-Restricted

------------------------------------

Title: E

Author: F

Date: 2020

Subject: G

Section: Non-Restricted

------------------------------------

\*\* Return A

\*\* Return B

\*\* Return C

Number of books in available: 5

------------------------------------

Title: A

Author: B

Date: 2020

Subject: C

Section: Restricted

------------------------------------

Title: B

Author: B

Date: 2019

Subject: C

Section: Non-Restricted

------------------------------------

Title: C

Author: B

Date: 2020

Subject: G

Section: Non-Restricted

------------------------------------

Title: D

Author: F

Date: 2019

Subject: C

Section: Non-Restricted

------------------------------------

Title: E

Author: F

Date: 2020

Subject: G

Section: Non-Restricted

------------------------------------

19: Stage3\_HR\_RH\_RB.txt

0 / 1

Traceback (most recent call last):

File "main.py", line 4, in <module>

from namedtuple import Book

ModuleNotFoundError: No module named 'namedtuple'

Run command

python3 main.py Stage3\_HR\_RH\_RB.txt

Your output

*Your program produced no output*

Expected output

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Friday 01, January 2021\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*HOLD REQUEST REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*01/01/2021\*\*\*\*\*\*\*\*\*\*

Student Name # of Days Requested

------------------------------------------------------------

No Holds Requested.

\*\*Add Hold Requests

\*\*\*CURRENT CHECKOUT REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*01/01/2021\*\*\*\*\*\*\*\*\*\*

Book Title Student Name Due Date

------------------------------------------------------------

A Z 01/05/2021

B Z 01/04/2021

C Z 01/03/2021

E Z 01/15/2021

\*\*\*\*\*HOLD REQUEST REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*01/01/2021\*\*\*\*\*\*\*\*\*\*

Student Name # of Days Requested

------------------------------------------------------------

C

X 1

Y 4

U 14

------------------------------------------------------------

E

X 14

Y 2

U 1

------------------------------------------------------------

\*\* Return E & Checkout to Hold

\*\* Verify Checkout & Hold

\*\*\*CURRENT CHECKOUT REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*01/01/2021\*\*\*\*\*\*\*\*\*\*

Book Title Student Name Due Date

------------------------------------------------------------

E X 01/15/2021

A Z 01/05/2021

B Z 01/04/2021

C Z 01/03/2021

\*\*\*\*\*HOLD REQUEST REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*01/01/2021\*\*\*\*\*\*\*\*\*\*

Student Name # of Days Requested

------------------------------------------------------------

C

X 1

Y 4

U 14

------------------------------------------------------------

E

Y 2

U 1

------------------------------------------------------------

20: Stage3\_HR\_Errors.txt(see Stage3\_HR\_Errors.out for output)

0 / 2

Traceback (most recent call last):

File "main.py", line 4, in <module>

from namedtuple import Book

ModuleNotFoundError: No module named 'namedtuple'

Run command

python3 main.py Stage3\_HR\_Errors.txt

Output results hidden by your instructor

21: Stage3\_CB\_AD\_RB\_OR.txt

0 / 1

Traceback (most recent call last):

File "main.py", line 4, in <module>

from namedtuple import Book

ModuleNotFoundError: No module named 'namedtuple'

Run command

python3 main.py Stage3\_CB\_AD\_RB\_OR.txt

Your output

*Your program produced no output*

Expected output

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Friday 01, January 2021\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*CURRENT CHECKOUT REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*01/01/2021\*\*\*\*\*\*\*\*\*\*

Book Title Student Name Due Date

------------------------------------------------------------

A Z 01/05/2021

B Z 01/04/2021

C Z 01/03/2021

E Z 01/15/2021

\*\* Overdue report when no books are over due

\*\*\*\*\*\*\*BOOKS DUE TODAY\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*01/01/2021\*\*\*\*\*\*\*\*\*\*

No books due today.

\*\*\*\*\*\*\*\*OVERDUE REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*01/01/2021\*\*\*\*\*\*\*# Days\*\*

No books overdue today.

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Saturday 02, January 2021\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Sunday 03, January 2021\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*BOOKS DUE TODAY\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*01/03/2021\*\*\*\*\*\*\*\*\*\*

C Z

\*\*\*\*\*\*\*\*OVERDUE REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*01/03/2021\*\*\*\*\*\*\*# Days\*\*

No books overdue today.

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Monday 04, January 2021\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Tuesday 05, January 2021\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*BOOKS DUE TODAY\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*01/05/2021\*\*\*\*\*\*\*\*\*\*

A Z

\*\*\*\*\*\*\*\*OVERDUE REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*01/05/2021\*\*\*\*\*\*\*# Days\*\*

B Z 1

C Z 2

22: Stage3\_CB\_RB\_HR\_DB.txt

0 / 1

Traceback (most recent call last):

File "main.py", line 4, in <module>

from namedtuple import Book

ModuleNotFoundError: No module named 'namedtuple'

Run command

python3 main.py Stage3\_CB\_RB\_HR\_DB.txt

Your output

*Your program produced no output*

Expected output

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Friday 01, January 2021\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*HOLD REQUEST REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*01/01/2021\*\*\*\*\*\*\*\*\*\*

Student Name # of Days Requested

------------------------------------------------------------

No Holds Requested.

\*\*Add Hold Requests

\*\*\*CURRENT CHECKOUT REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*01/01/2021\*\*\*\*\*\*\*\*\*\*

Book Title Student Name Due Date

------------------------------------------------------------

A Z 01/05/2021

B Z 01/04/2021

C Z 01/03/2021

E Z 01/15/2021

\*\*\*\*\*HOLD REQUEST REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*01/01/2021\*\*\*\*\*\*\*\*\*\*

Student Name # of Days Requested

------------------------------------------------------------

C

X 1

Y 4

U 14

------------------------------------------------------------

E

X 14

Y 2

U 1

------------------------------------------------------------

\*\* Return E & Checkout to Hold

\*\* Verify Checkout & Hold

\*\*\*CURRENT CHECKOUT REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*01/01/2021\*\*\*\*\*\*\*\*\*\*

Book Title Student Name Due Date

------------------------------------------------------------

E X 01/15/2021

A Z 01/05/2021

B Z 01/04/2021

C Z 01/03/2021

\*\*\*\*\*HOLD REQUEST REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*01/01/2021\*\*\*\*\*\*\*\*\*\*

Student Name # of Days Requested

------------------------------------------------------------

C

X 1

Y 4

U 14

------------------------------------------------------------

E

Y 2

U 1

------------------------------------------------------------

\*\* Delete Book E

\*\* Print Inventory, Checkout & Hold Reports to verify E is missing

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*LIBRARY INVENTORY\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Number of books available: 4

------------------------------------

Title: A

Author: B

Date: 2020

Subject: C

Section: Restricted

------------------------------------

Title: B

Author: B

Date: 2019

Subject: C

Section: Non-Restricted

------------------------------------

Title: C

Author: B

Date: 2020

Subject: G

Section: Non-Restricted

------------------------------------

Title: D

Author: F

Date: 2019

Subject: C

Section: Non-Restricted

------------------------------------

\*\*\*CURRENT CHECKOUT REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*01/01/2021\*\*\*\*\*\*\*\*\*\*

Book Title Student Name Due Date

------------------------------------------------------------

A Z 01/05/2021

B Z 01/04/2021

C Z 01/03/2021

\*\*\*\*\*HOLD REQUEST REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*01/01/2021\*\*\*\*\*\*\*\*\*\*

Student Name # of Days Requested

------------------------------------------------------------

C

X 1

Y 4

U 14

------------------------------------------------------------

23: Stage3Complete.txt

0 / 4

Traceback (most recent call last):

File "main.py", line 4, in <module>

from namedtuple import Book

ModuleNotFoundError: No module named 'namedtuple'

Run command

python3 main.py Stage3Complete.txt

Output results hidden by your instructor

24: Stage5\_DR.txt

0 / 1

Traceback (most recent call last):

File "main.py", line 4, in <module>

from namedtuple import Book

ModuleNotFoundError: No module named 'namedtuple'

Run command

python3 main.py Stage5\_DR.txt

Your output

*Your program produced no output*

Expected output

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Friday 01, January 2021\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*CURRENT CHECKOUT REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*01/01/2021\*\*\*\*\*\*\*\*\*\*

Book Title Student Name Due Date

------------------------------------------------------------

E U 01/15/2021

A Z 01/05/2021

B Z 01/04/2021

C Z 01/03/2021

\*\* Overdue report when no books are over due

\*\*\*\*\*\*\*BOOKS DUE TODAY\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*01/01/2021\*\*\*\*\*\*\*\*\*\*

No books due today.

\*\*\*\*\*\*\*\*OVERDUE REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*01/01/2021\*\*\*\*\*\*\*# Days\*\*

No books overdue today.

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Saturday 02, January 2021\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Sunday 03, January 2021\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*BOOKS DUE TODAY\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*01/03/2021\*\*\*\*\*\*\*\*\*\*

C Z

\*\*\*\*\*\*\*\*OVERDUE REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*01/03/2021\*\*\*\*\*\*\*# Days\*\*

No books overdue today.

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Monday 04, January 2021\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Tuesday 05, January 2021\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*BOOKS DUE TODAY\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*01/05/2021\*\*\*\*\*\*\*\*\*\*

A Z

\*\*\*\*\*\*\*\*OVERDUE REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*01/05/2021\*\*\*\*\*\*\*# Days\*\*

B Z 1

C Z 2

\*\*\*BOOKS DUE BETWEEN\*\*\*\*\*\*\*\*01/01/2021 to 01/20/2021\*\*\*\*\*\*\*\*

A Z

B Z

C Z

E U

\*\*\*BOOKS DUE BETWEEN\*\*\*\*\*\*\*\*01/01/2021 to 01/04/2021\*\*\*\*\*\*\*\*

B Z

C Z

\*\*\*BOOKS DUE BETWEEN\*\*\*\*\*\*\*\*01/01/2021 to 01/20/2021\*\*\*\*\*\*\*\*

A Z

B Z

E U

\*\*\*BOOKS DUE BETWEEN\*\*\*\*\*\*\*\*01/01/2021 to 01/04/2021\*\*\*\*\*\*\*\*

B Z

25: Stage5\_UR1.txt

0 / 1

Traceback (most recent call last):

File "main.py", line 4, in <module>

from namedtuple import Book

ModuleNotFoundError: No module named 'namedtuple'

Run command

python3 main.py Stage5\_UR1.txt

Your output

*Your program produced no output*

Expected output

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Friday 01, January 2021\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*CURRENT CHECKOUT REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*01/01/2021\*\*\*\*\*\*\*\*\*\*

Book Title Student Name Due Date

------------------------------------------------------------

E U 01/15/2021

A Z 01/05/2021

B Z 01/04/2021

C Z 01/03/2021

\*\* Overdue report when no books are over due

\*\*\*\*\*\*\*BOOKS DUE TODAY\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*01/01/2021\*\*\*\*\*\*\*\*\*\*

No books due today.

\*\*\*\*\*\*\*\*OVERDUE REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*01/01/2021\*\*\*\*\*\*\*# Days\*\*

No books overdue today.

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Saturday 02, January 2021\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Sunday 03, January 2021\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*BOOKS DUE TODAY\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*01/03/2021\*\*\*\*\*\*\*\*\*\*

C Z

\*\*\*\*\*\*\*\*OVERDUE REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*01/03/2021\*\*\*\*\*\*\*# Days\*\*

No books overdue today.

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Monday 04, January 2021\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Tuesday 05, January 2021\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*BOOKS DUE TODAY\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*01/05/2021\*\*\*\*\*\*\*\*\*\*

A Z

\*\*\*\*\*\*\*\*OVERDUE REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*01/05/2021\*\*\*\*\*\*\*# Days\*\*

B Z 1

C Z 2

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*USER REPORT for Z\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Z Curse: Hair Loss

-------------------------CHECKOUTS--------------------------

A 01/05/2021

B 01/04/2021

C 01/03/2021

---------------------------HOLDS----------------------------

No holds.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*USER REPORT for U\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

-------------------------CHECKOUTS--------------------------

E 01/15/2021

---------------------------HOLDS----------------------------

No holds.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*USER REPORT for Y\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

-------------------------CHECKOUTS--------------------------

No checkouts.

---------------------------HOLDS----------------------------

No holds.

26: Stage5\_UR2.txt

0 / 2

Traceback (most recent call last):

File "main.py", line 4, in <module>

from namedtuple import Book

ModuleNotFoundError: No module named 'namedtuple'

Run command

python3 main.py Stage5\_UR2.txt

Output results hidden by your instructor

27: Stage5Complete.txt(for testcase output, see Stage5Complete.out)

0 / 4

Traceback (most recent call last):

File "main.py", line 4, in <module>

from namedtuple import Book

ModuleNotFoundError: No module named 'namedtuple'

Run command

python3 main.py Stage5Complete.txt

Output results hidden by your instructor

28: Extra Credit: Penalty Report

0 / 1

Traceback (most recent call last):

File "main.py", line 4, in <module>

from namedtuple import Book

ModuleNotFoundError: No module named 'namedtuple'

Run command

python3 main.py Stage4\_PR\_ExtraCredit.txt

Your output

*Your program produced no output*

Expected output

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Wednesday 09, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\* Additional Tests: Check Out

\*\*\*\* Try checking out a book that has already been checked out

Fifteenth-Century Fiends is currently unavailable to be checked out.

\*\*\*\* Book Not Found

\*\*\*\* Student Not Found

Winogrand 's Wondrous Water Plants not in inventory.

\*\*\*\*\*\* Checkout a Restricted Title: No Pass Code

Secrets of the Darkest Art is currently unavailable to be checked out.

\*\*\*\*\*\* Checkout a Restricted Title: Invalid Pass Code

Secrets of the Darkest Art is currently unavailable to be checked out.

\*\*\*\* Additional Tests: Hold Requests

\*\* Test Requesting a Book Hold a student currently has checked out

Draco Malfoy currently has checked out Ancient Runes Made Easy.

\*\* Test Requesting a Book Hold for a book a student who already has a hold

Luna Lovegood has already requested a hold for Ancient Runes Made Easy.

\*\*\*\* Test Deleting a Book that doesn't exist

A Wizard's Guide to the Dark Web Not Found. Cannot be deleted.

\*\*\*CURRENT CHECKOUT REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*12/09/2020\*\*\*\*\*\*\*\*\*\*

Book Title Student Name Due Date

------------------------------------------------------------

Fifteenth-Century Fiends Harry Potter 12/11/2020

Secrets of the Darkest Art Hermione Granger 12/23/2020

Winogrand's Wondrous Water Pla Hermione Granger 12/13/2020

Ancient Runes Made Easy Draco Malfoy 12/23/2020

Magick Moste Evile Draco Malfoy 12/10/2020

\*\* Advancing Date to >6 days Overdue Report

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Thursday 10, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*PENALTY REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*12/10/2020\*\*\*\*\*\*\*\*\*\*

Gryffindor Point Deductions: 0

Hufflepuff Point Deductions: 0

Ravenclaw Point Deductions: 0

Slytherin Point Deductions: 0

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Friday 11, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*PENALTY REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*12/11/2020\*\*\*\*\*\*\*\*\*\*

Gryffindor Point Deductions: 0

Hufflepuff Point Deductions: 0

Ravenclaw Point Deductions: 0

Slytherin Point Deductions: 10

Draco Malfoy Curse: Ear-Shrivelling

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Saturday 12, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*PENALTY REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*12/12/2020\*\*\*\*\*\*\*\*\*\*

Gryffindor Point Deductions: 10

Harry Potter Curse: Ear-Shrivelling

Hufflepuff Point Deductions: 0

Ravenclaw Point Deductions: 0

Slytherin Point Deductions: 30

Draco Malfoy Curse: Hair Loss

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Sunday 13, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*PENALTY REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*12/13/2020\*\*\*\*\*\*\*\*\*\*

Gryffindor Point Deductions: 30

Harry Potter Curse: Hair Loss

Hufflepuff Point Deductions: 0

Ravenclaw Point Deductions: 0

Slytherin Point Deductions: 60

Draco Malfoy Curse: Curse of the Bogies

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Monday 14, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*PENALTY REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*12/14/2020\*\*\*\*\*\*\*\*\*\*

Gryffindor Point Deductions: 70

Harry Potter Curse: Curse of the Bogies

Hermione Granger Curse: Ear-Shrivelling

Hufflepuff Point Deductions: 0

Ravenclaw Point Deductions: 0

Slytherin Point Deductions: 110

Draco Malfoy Curse: Slug-Vomiting

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Tuesday 15, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*PENALTY REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*12/15/2020\*\*\*\*\*\*\*\*\*\*

Gryffindor Point Deductions: 140

Harry Potter Curse: Slug-Vomiting

Hermione Granger Curse: Hair Loss

Hufflepuff Point Deductions: 0

Ravenclaw Point Deductions: 0

Slytherin Point Deductions: 190

Draco Malfoy Curse: Book Return

\*\*\*\*\*\*\*\*\*\*\*\*\*HOGWARTS LIBRARY MANAGEMENT SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Wednesday 16, December 2020\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\* Overdue Report

\*\*\*\*\*\*\*\*OVERDUE REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*12/16/2020\*\*\*\*\*\*\*# Days\*\*

Fifteenth-Century Fiends Harry Potter 5

Magick Moste Evile Draco Malfoy 6

Winogrand's Wondrous Water Plants Hermione Grange 3

\*\* Test Penalty Report

\*\*\*\*\*\*\*\*PENALTY REPORT\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*12/16/2020\*\*\*\*\*\*\*\*\*\*

Gryffindor Point Deductions: 250

Harry Potter Curse: Book Return

Hermione Granger Curse: Curse of the Bogies

Hufflepuff Point Deductions: 0

Ravenclaw Point Deductions: 0

Slytherin Point Deductions: 270

Draco Malfoy Curse: Book Return

Thank you for using the Hogwarts Library Management System!