

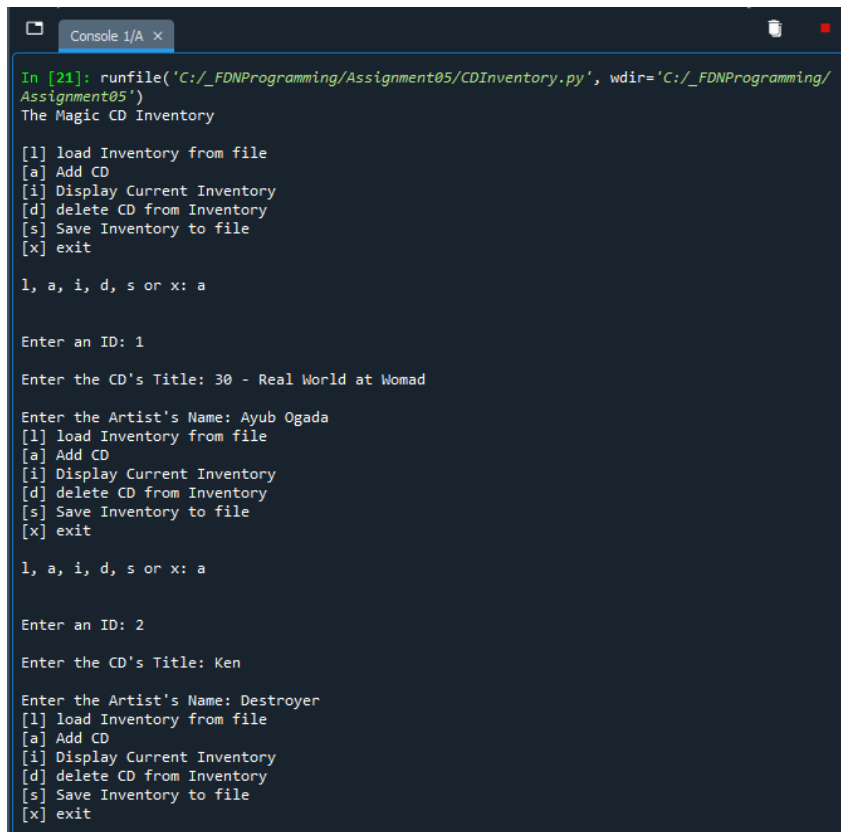
Assignment 5

Introduction

Assignment 5 builds on the CD inventory we made in Assignment 4, but uses a dictionary instead of a list for the inner list. We started with a starter py file that was provided, and added functionality to the file. This gives us experience working with others' code. I added the easier code first such as allowing the user to add CD data. The basic steps included:

1. Declare variables.
2. Use a while loop so user keeps coming back to menu until exiting.
3. Print some opening text for the user and ask for input in a menu.
4. Add an exit option near the top of the script to break out of the while loop.
5. Allow user to load data from file by using open() in read (r) mode, appending dictionary rows, and close.
6. Allow user to add CD data (ID number, CD title, artist name), and append this information to the table.
7. Allow user to display current inventory by printing the rows.
8. Allow user to delete a row of data from memory (not from file) by ID number using clear().
9. Allow user to save by opening a text file in append (a) mode, writing the table rows to the file, and closing.
10. Include an elif statement in case the user does not enter a valid choice.

Below are screenshots of my program running in Spyder:



```
Console 1/A x
In [21]: runfile('C:/_FDNProgramming/Assignment05/CDInventory.py', wdir='C:/_FDNProgramming/
Assignment05')
The Magic CD Inventory

[l] load Inventory from file
[a] Add CD
[i] Display Current Inventory
[d] delete CD from Inventory
[s] Save Inventory to file
[x] exit

l, a, i, d, s or x: a

Enter an ID: 1

Enter the CD's Title: 30 - Real World at Womad

Enter the Artist's Name: Ayub Ogada
[l] load Inventory from file
[a] Add CD
[i] Display Current Inventory
[d] delete CD from Inventory
[s] Save Inventory to file
[x] exit

l, a, i, d, s or x: a

Enter an ID: 2

Enter the CD's Title: Ken

Enter the Artist's Name: Destroyer
[l] load Inventory from file
[a] Add CD
[i] Display Current Inventory
[d] delete CD from Inventory
[s] Save Inventory to file
[x] exit
```

Figure 1. Upper screenshot of CD Inventory running in Spyder. User enters two CDs.

```
Console 1/A X
Enter an ID: 3
Enter the CD's Title: Fresia Magdalena
Enter the Artist's Name: Sofia Kourtesis
[l] load Inventory from file
[a] Add CD
[i] Display Current Inventory
[d] delete CD from Inventory
[s] Save Inventory to file
[x] exit
l, a, i, d, s or x: s
[l] load Inventory from file
[a] Add CD
[i] Display Current Inventory
[d] delete CD from Inventory
[s] Save Inventory to file
[x] exit
l, a, i, d, s or x: i
ID, CD Title, Artist
1, 30 - Real World at Womad, Ayub Ogada
2, Ken, Destroyer
3, Fresia Magdalena, Sofia Kourtesis
[l] load Inventory from file
[a] Add CD
[i] Display Current Inventory
[d] delete CD from Inventory
[s] Save Inventory to file
[x] exit
```

Figure 2. Lower screenshot of CD Inventory running in Spyder. User enters third CD, checks inventory with 'i'.

Figure 3 below is a screenshot of the program running in the Anaconda terminal.

```
Anaconda Prompt (Anaconda3) - python CDInventory.py
[d] delete CD from Inventory
[s] Save Inventory to file
[x] exit
l, a, i, d, s or x: a
Enter an ID: 4
Enter the CD's Title: Preacher's Daughter
Enter the Artist's Name: Ethel Cain
[l] load Inventory from file
[a] Add CD
[i] Display Current Inventory
[d] delete CD from Inventory
[s] Save Inventory to file
[x] exit
l, a, i, d, s or x: i
ID, CD Title, Artist
4, Preacher's Daughter, Ethel Cain
[l] load Inventory from file
[a] Add CD
[i] Display Current Inventory
[d] delete CD from Inventory
[s] Save Inventory to file
[x] exit
l, a, i, d, s or x: s
```

Figure 3. CD Inventory running in Anaconda. User adds 4th CD, displays inventory, and saves.

GitHub

For this assignment we are required to upload our python file and this knowledge document to GitHub. The link for my assignment is: https://github.com/rolflekve/Assignment_05

Summary

Assignment 5 was slightly easier than Assignment 4, in large part because we were provided starter script that gave the basic structure of the code. Using the starter script and listings in Module 5, I was able to put together the code. The CD Inventory has been updated using a dictionary as the 'inner' list.