Assignment 06

Functions

Introduction

This week we were expected to create a script that manages a To Do List and post it in github. My program can be found here: https://github.com/zeynepo/IntroToProg-Python

Creating, Managing and Saving a Dictionary using Functions

This week we are expected to do last week's assignment but with functions. I used the code from last week to create the functions. I only changed the logic of priority setting. Last week I took the order in which the tasks are entered to be the priority. This week I'm changing it to be set by the user as in line with Randall's logic demonstrated during the lecture. I kept the process of removing the task by its priority, instead of entering the task itself. Less typing for the user.

I think the aim of this week's assignment is to help us understand the difference between global values and local values and how to manage them.

Data layer
- Function to read the data from text file or create text file

Processing layer
- Functions to
  - Add new task and priority
  - Delete existing task and priority
  - Write list to file

Input/ Output layer
- Functions to
  - Display menu
  - Display existing tasks and priority
  - Take user input for menu choice
  - Take user input to add new task and priority
  - Take user input to delete existing task and priority

Main body

Assignment 06

PyCharm console view:

```
C:\Python\Python3.x\python.exe "C:\Users\TOSHIBA\Desktop\Python Course\Assignments\Assignment06\Assigment06_Zeynep.py"

        Menu of Options
        1) Show current data
        2) Add a new task
        3) Remove an existing task
        4) Save data to file
        5) Exit program


Which option would you like to perform? [1 to 5] - 3

Enter the priority of the task to remove: 3
Task make dinner with priority 3 has been removed.

        Menu of Options
        1) Show current data
        2) Add a new task
        3) Remove an existing task
        4) Save data to file
        5) Exit program


Which option would you like to perform? [1 to 5] - 1

******* The current tasks ToDo are: *******
do write up (1)
do homework (2)
go to the gym (4)
call parents (5)
*******************************************


        Menu of Options
        1) Show current data
        2) Add a new task
        3) Remove an existing task
        4) Save data to file
        5) Exit program


Which option would you like to perform? [1 to 5] - 4

Data Saved!

        Menu of Options
        1) Show current data
        2) Add a new task
        3) Remove an existing task
        4) Save data to file
        5) Exit program


Which option would you like to perform? [1 to 5] - 5
```

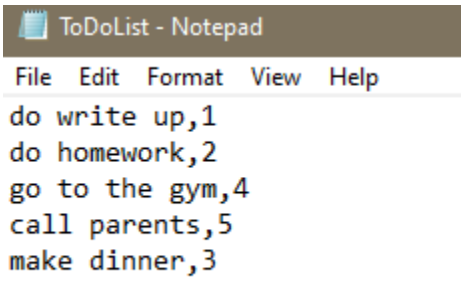
Assignment 06

Command prompt view:

```
C:\Users\TOSHIBA>python "C:\Users\TOSHIBA\Desktop\Python Course\Assignments\Assignment06\Assigment06_Zeynep.py"

        Menu of Options
        1) Show current data
        2) Add a new task
        3) Remove an existing task
        4) Save data to file
        5) Exit program


Which option would you like to perform? [1 to 5] - 1

******* The current tasks ToDo are: *******
do write up (1)
do homework (2)
go to the gym (4)
call parents (5)
*******************************************


        Menu of Options
        1) Show current data
        2) Add a new task
        3) Remove an existing task
        4) Save data to file
        5) Exit program


Which option would you like to perform? [1 to 5] - 2

Please enter task: make dinner
What is the priority? - 3
Task added to your to do list

        Menu of Options
        1) Show current data
        2) Add a new task
        3) Remove an existing task
        4) Save data to file
        5) Exit program


Which option would you like to perform? [1 to 5] - 4
```

```
Data Saved!

        Menu of Options
        1) Show current data
        2) Add a new task
        3) Remove an existing task
        4) Save data to file
        5) Exit program


Which option would you like to perform? [1 to 5] - 5
```

Assignment 06



Summary

I was struck by the difference between simple data and complex data and how Python processes them. This just goes to show how essential it is to use complex data arguments so that you don't have to force recalculate everything when a value is edited. Though I didn't really understand how Listing 13 showcases this better or further than Listing 12.