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Course: Foundation of Programming (Python)

Assignment 6

ToDoList Script

Introduction

In this assignment I will explain the steps to create a python script that ask the user to their Task and Priority to add on to do list or removed them , and then used the **write and read** statement to **write()** to data to the file and **read()** function reads data previously written to a file and store data into ToDoList, where each Task and Priority are stored in rows and columns. We used **function** which is a block of code which runs when it is called.

Creating my Scripts

I began modifying the script in the PyCharm editor tool, I create a folder in a location I can find my file easily and added **Assignment06_Startter.py** within the folder. I declare my variables in the following form:

```
# Declare variables and constants
file_name_str = "ToDoFile.txt"  # The name of the data file
file_obj = None  # An object that represents a file
row_dic = {}  # A row of data separated into elements of a dictionary {Task,Priority}
table_lst = []  # A list that acts as a 'table' of rows
choice_str = ""  # Captures the user option selection
```

Figure 1: A screenshot of variable declaration from my script.

I used the **input()** function to ask the user to enter more data until they are asked to exit the program. I used the **"While loop**" statement to execute my statement if the condition the user is inputting is true. **"for loop"** I used the for loop statement to automatically extract the row of data. **Dic {}** was used to store data values in key: value pairs. **List[]** was used to store items in a single variable. The **return()** statement is a special statement that you can use inside function or method to send the function results back to the caller. I used the **open** statements to open a text file with the **"w**" statement to write the text file anytime the user enters a new data and **"r**" statement to reads data written previously to the file, **close()** method was also used to close an open file after it has been written or reads and the **print()** function was used to display message to guide the user through the process. Data was passed, known as parameters, into a function.

Performing and testing the Script

I tested out my script in the PyCharm and everything was running perfectly but started having an error when I run in the Command prompt, the text file was not found. I run the text file alone in the CMD prompt and it runs, so I copied my text file unto the Assignment06_Modify.py folder and re-run it and it was working perfectly.

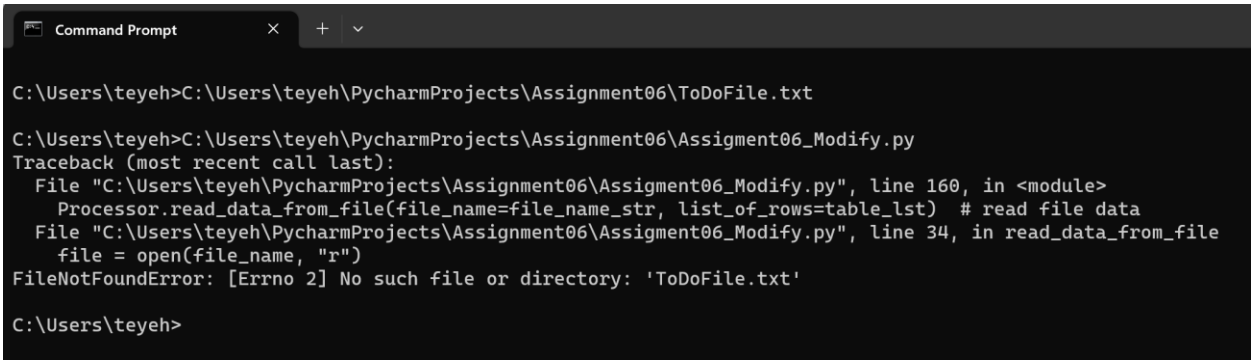

Figure 2: A screenshots of error in Command prompt.

Final Basic Home Inventory Script

The script was modified in the PyCharm editing tool, and after my code was completely running to my satisfaction, I updated the changelog and add notes to the script explaining each action performing in every line in my code and verify the text file is working. Below is a screenshot of my final script running in PyCharm and verifying that the file has data.

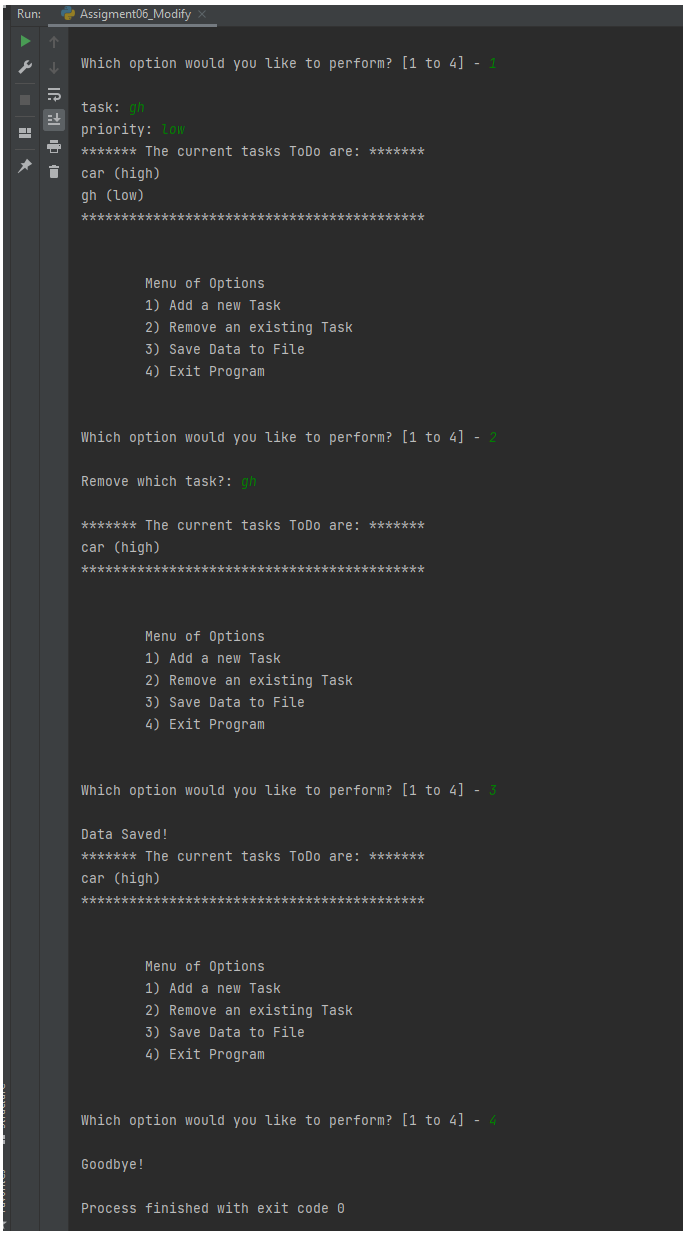

Figure 3: A screenshot of the script running in PyCharm.

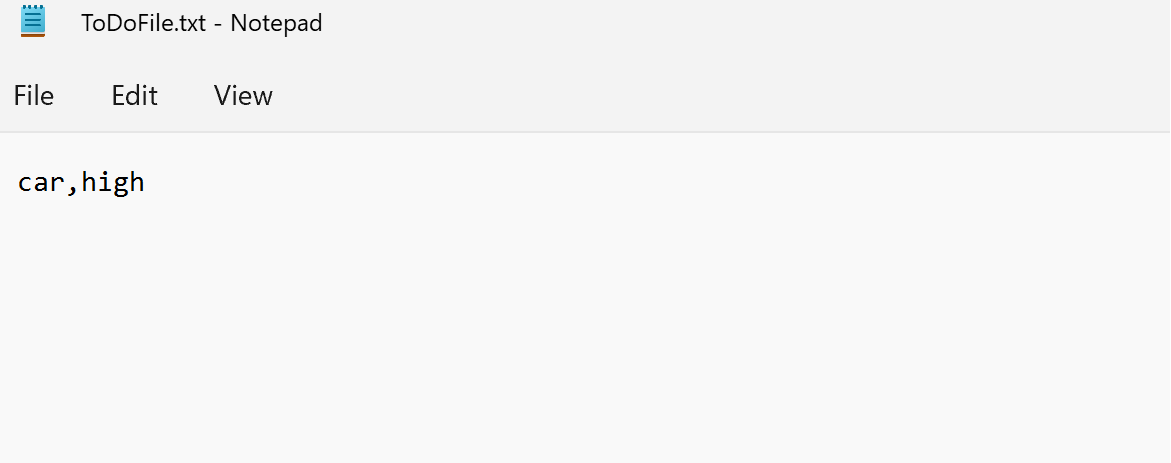

Figure 4: Verifying the file has data.

Running the Script in Command Prompt

I right click on the script file Data_Manu.py in my Assignment06 folder in the PyCharm IDE and navigate to find the path copy it and open it in command shell to run the script and follow the command prompt to enter user data. Below is screenshot of script running in a command window.

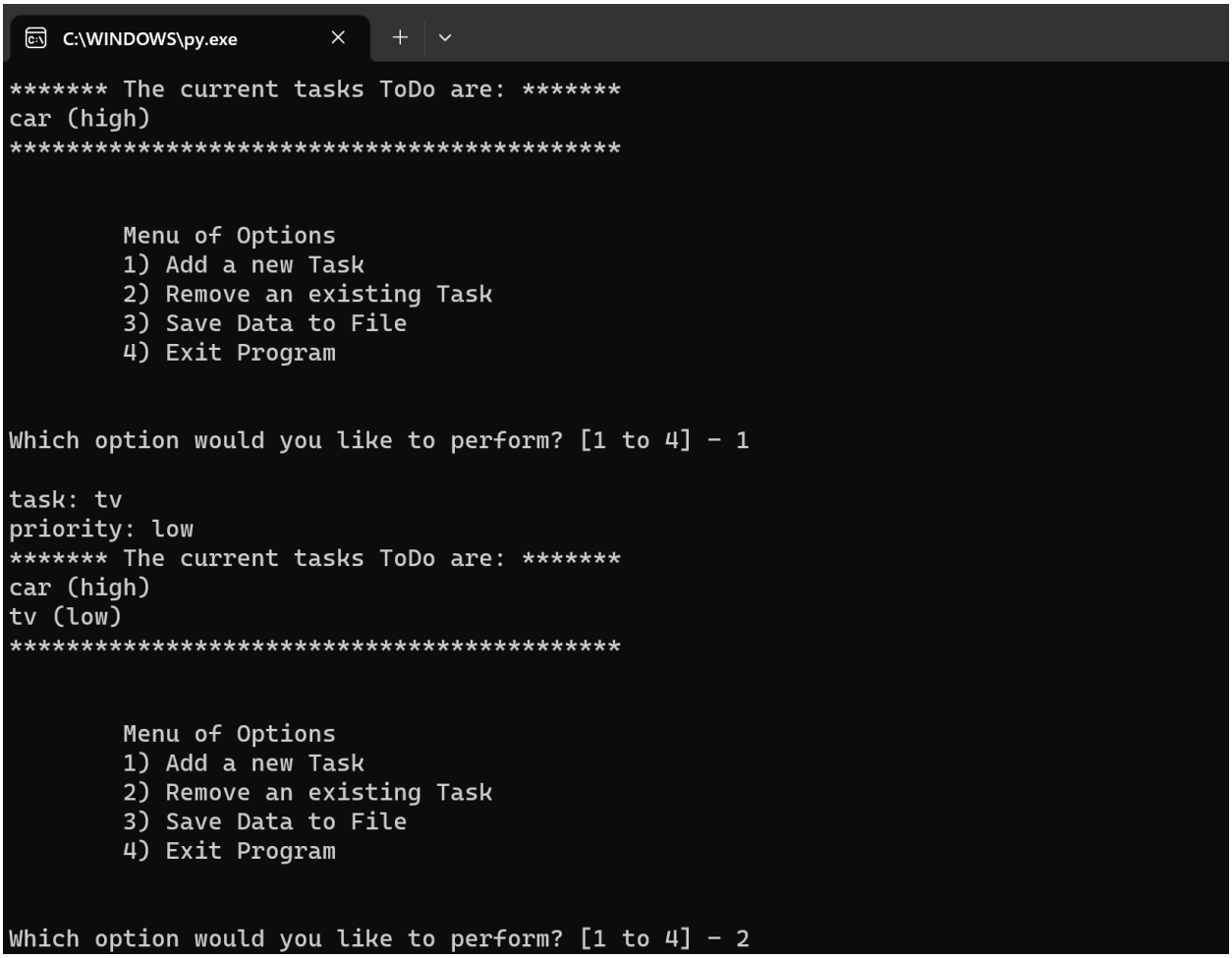

Figure 5: A screenshot of the script running in command window.

Summary

After reading through the notes, videos, and reviewing the website I gain better understanding to execute my work successfully and demonstrate my knowledge by performing assignment 6.