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Foundation Of Programming Using Python

Assignment05

[Megaman3491/IntroToProg-Python: My 5th week making papers about learning how to code with python. (github.com)](https://github.com/Megaman3491/IntroToProg-Python)

**Data Savings, Dictionaries, and Functions**

**Introduction**

Hello everyone, today, in this paper today I am going to review what I studied in the fifth week of my programming camp. In this module I studied about saving data with dictionary and list. In this paper I’ll be splitting the materials into some parts for it to be understood easily. I’ll be explaining about what I studied, List, Dictionary, Function, Template, My Script, and finally the summary to summarize my paper.

**1.What I studied**

To make today’s paper I studied from the course to python 5th video made by Mr. Randal Roots.

Next, I studied a video from an external website called <https://youtu.be/m0o0CkYsDzI> (External site)

This is where I studied from this week, I learned about list and dictionary. Which are data. I learned how to run a command or a code with function. I also learned about making templates. Finally I combine all of that and learn how to write in a txt file and read the saved data.

**2.List**

List is a data that can holds multiple data in one variable. Lists are made by placing multiple items in a variable.

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***Figure 1***

The variable is X and the items in it are “hello”, “world”, and “today” (***figure 1***).

You can also call out each item in it by using a specific command.

**3.Dictionary**

Dictionaries are kind of like list. It holds multiple data in it, but In dictionaries we can hold each item with a key\_item.

Graphical user interface, application

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***Figure 2***

X is the variable for a dictionary. “Hello is a data that is attached to it’s key, which in this case “1” (***Figure 2***)

Multiple dictionaries can be put in a list and can be printed out for the user to see. You can do that by making a list with dictionaries’ variables in it.

**4.Function**

Functions are statement where it can do a command when it is called. You can make a block of code and put it in a function. That block of called can be called or used multiple times by calling out it’s function.

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***Figure 3***

Here the code is to print X and O and the function name is Values (***Figure 3***)

**5.Template**

Templates are the beginning of a script. Every person has their own template. Professional programmers usually have a template for themselves. This is used to make the script tidy and easy to understand since they work with other people.

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***Figure 4***

This is my template. It is beneficial to me and my groupmates if I stick with one template. Not only this can make the script look neat it makes it easier to understand the script.

**6.Script**

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***Figure 5***

This is how I made a to do list with python. First, I ask a question to ask the user if they want to add a to do list, read out their to do list, or exit the program.

If they want to write a data, I made two variables for the user to input their task and priority. After I made a dictionary to make one variable out of those two. I opened the file which is called ToDoList and fill it with the data they wrote. Finally, it will close the file and ask the user to choose again.

If they pick read, the program will read the file and print out the data with the format I have told it to use.

The loop will break if the user type in “exit”

If they put other that my options, the program will ask it to put the needed input and ask the user again until the loop is broken.

Text

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This is what it will show the user if they use my program (***Figure 6***). It will ask the user to write or read the data stored. If they choose to write(w), they will input two things. If they choose to read(r), the program will print out all the data they type in the file.

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***Figure 7***

Data saved in the txt file (***Figure 7***). If you keep choosing to write. The data will keep increasing and it will read out all of it when you tell it to read.

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***Figure 8***

In command prompt it would look almost the same (***Figure 8***)

**7.Summary**

Thank you for reading my 5th paper about saving data with list and dictionaries. All of this can be done thanks to Mr. Randal Roots and Mr. Dave Blodgett for the videos and external sites prepared for me to learn. I hope the information given can be useful and can be understood easy. Thank you for reading.