Hyperion Development

Python Software Developer

Task: Input and Output

www.hyperiondev.com

Introduction

Welcome to the Input and Output Task!

Please feel free to visit www.hyperiondev.com and view the tools and methods that will help you throughout the course.

For any queries regarding the course, need help understanding the task or general comments, please contact us at help@hyperiondev.com.

Overview

Until now, the Python code you've been writing comes from one source and only goes to one place, you type it in at the keyboard and its results are displayed in the console. But what if you want to read information from a file on your computer, and/or write that information to another file?

This process is called **file I/O** (the "I/O" stands for "input/output"), and Python has a number of built-in functions that handle this for you. In this task, we will look at different ways of achieving this in python.

-The Hyperion Team

Instructions

First read example.py, open it using Notepad++ (Right click the file and select 'Edit with Notepad++').

- Example.py should help you understand some simple Python. Every task will have example code to help you get started. Make sure you read all of example.py and try your best to understand.
- You may run example.py to see the output. The instructions on how to do this are inside the file. Feel free to write and run your own example code before doing Task 4 to become more comfortable with Python.
- You are not required to read the entire of Additional Reading.pdf, it is purely for extra reference.

Compulsory Task

Follow these steps:

Now, create a python file called **forgetful.py**. Imagine your friend was very forgetful and always entered his email password incorrectly. You want to write a python program that takes all his incorrect password entries, stores them in a list and then records all his incorrect
password entries in a text file called **wrongpasswords.txt**.

Example: your friend's password is 'rusty'. But he enters 'rusty123', 'Rusty', 'rustless' before finally remembering that his password is 'rusty' and enters it correctly.

In this situation **wrongpasswords.txt** should read exactly like this:

Incorrect password 1: rusty123
Incorrect password 2: Rusty
Incorrect password 3: rustless
Correct password entered on 4th entry.

The program should ask the user for input by saying 'Please enter your password'. You can use code from the program you wrote in Task 3. The correct password will always be 'rusty' but the user can of course enter any String.

Optional Task

Follow these steps:

Edit your completed program so that the number of characters your friend gets wrong is also stored for each incorrect password.

In the same situation given above, wrongpasswords.txt should read this exactly:

Incorrect password 1: rusty123 , wrong by 3 characters.
Incorrect password 2: Rusty , wrong by 1 characters.
Incorrect password 3: rustless , wrong by 4 characters.
Correct password entered on 4th entry.

You should define a separate function in your code, called countDifference, that takes in a String.

Things to look out for:

1. Make sure that you have installed and setup all programs correctly. You have setup **Dropbox** correctly if you are reading this, but **Python or Notepad++** may not be installed correctly.
2. If you are not using Windows, please ask your tutor for alternative instructions.

Still need help?

Just write your queries in your comments.txt file and your tutor will respond. Alternatively you can email us on help@hyperiondev.com.

Task Statistics

Last update to task: 20/05/2016
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