Lab 10-1 -Spell Check

Goals

- Practice with variables
- Practice with functions
- Practice file reading

Setup

- In PyCharm, create a new project or open an existing one (such as Labs)
- Create a new Python file using the following naming convention:

```
ITP115_L10_1_LastName_FirstName
(replace LastName with your last/family name and FirstName with your first name)
```

• Your new file must begin with comments in the following format (replace the name and email with your actual information):

```
# Name, USC email
# ITP 115, Spring 2020
# Lab 10-1
```

Requirements

Your program must perform the following:

- Write a program that has the following functions: readDictionaryFile(), checkWord(), and main().
- Your goal with this program is to have the user enter a word to see if it is in the dictionary. If it is not in the dictionary, then it is misspelled.
- You will be given one text file containing a dictionary of words.
- Put that file in the same folder as your Python file.
- In your Python file, define the following functions:
 - o readDictionaryFile(fileName)
 - Parameter (1): a string containing the file name of the dictionary
 - Return value: a list of strings containing all words in the dictionary
 - Read in each word of the dictionary file and store it in the dictionary list
 - Close the file and return the dictionary list

o checkWord(dictionaryList, word)

- Parameter (1): a list of strings containing the dictionary list
- Parameter (2): a string containing the word to check
- Return value: a Boolean True if the word is in the dictionary and False if the word is not in the dictionary
- Check if the word is in the dictionaryList
- Return True or False

o main()

- Parameter: None
- Return value: None
- Ask the user for the file name of the dictionary and store it in a separate variable.
- Use the file name to create a list of the dictionary words calling the readDictionaryFile() function. Be sure to store the returned list in a variable.
- Ask the user to enter a word and store it in a variable.
- Call the **checkWord()** function to see if the word is in the dictionary.
- Print an appropriate message.

Sample Output 1

```
Welcome to the Spell Check!

Please enter the dictionary file you wish to read in: dictionary.txt

Please enter the word you wish to spell check: wierd

That word is NOT in the dictionary, so it must be spelled wrong.
```

Sample Output 2

```
Welcome to the Spell Check!

Please enter the dictionary file you wish to read in: dictionary.txt

Please enter the word you wish to spell check: weird

That word is in the dictionary.
```

Deliverables and Submission Instructions

- Create a zip file containing your Python code. This cannot be done within PyCharm. Find the file or folder on your computer and compress it.
 - a. Windows:
 - 1. Using File Explorer, select your lab file
 - 2. Right click
 - 3. Send to ->
 - 4. Compressed (zipped) folder
 - b. Mac OSX:
 - 1. Using Finder, select your lab file
 - 2. Right click
 - 3. Compress "FileName"
- Upload the zip file to your Blackboard section:
 - 1. On Blackboard, click on the Labs item in the course menu on the left.
 - 2. Click on the specific item for this assignment (starts with L and a number).
 - 3. Click on the Browse My Computer button and select your zip file.
 - 4. Click the Submit button.