Lab 4-1 – Pig Elvish

Goals

- For loops

Background

- Pig Elvish is a gibberish (made-up) language similar to Pig Latin, but designed to sound like the Elvish language spoken by the Elves in *Lord of the Rings.* (example of Elvish)
- To "translate" an English word into Pig Elvish, follow these rules (adapted from this site):
    1. Take the first letter of the word and move it to the end of the word.
    2. If the word is four letters or more, append a random vowel to the end of the word (**aeiou**).
    3. If the word is three letters or fewer, append "**en**" to the end of the word.
    4. Change all **k** characters to **c** characters.
    5. If there is an **e** at the end of the word, replace it with **ë** (**e** with an umlaut). To type ë using Mac OS, hold down the option key and press u, and then press e. To type ë using Windows, hold down the ALT key and type 0235.
    6. Handle capital letters properly:
        - If the first letter of the English word is capitalized, make it lower case when you append it to the end
        - Then capitalize the new first letter of the Pig Elvish word
            - Tolkien Olcienti
            - Trojan Rojantu
- Examples:
    - a aen
    - while hilewa
    - python ythonpë
    - Quick Uiccqi

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_L4_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 4-1
```

Requirements

- Create a program to translate a single word at a time from English into Pig Elvish.
- Using a **while** loop, first ask the user enter a word in English.
- "Translate" the user's word into Elvish.
- Display the word in Elvish.
- Ask the user if they want to continue.
  - If yes, ask them for another word to translate.
  - If no, print a goodbye message in Elvish.
- Hint: Strings have methods that may be useful.
  - **`someString.isupper()`** checks whether all the letters in the string are uppercase and returns a Boolean: **`True`** if the string is all uppercase, or **`False`** otherwise.
    - For example,

```
# consider that letter is a string
if letter.isupper() == True:
   # letter is uppercase
else:
   # letter is lowercase
```

  - **`someString.capitalize()`** returns a copy of the string with only the first letter capitalized
    - For example,

```
# consider that letter is a string
capitalLetter = letter.capitalize()
```

  - **`someString.replace(old, new)`** returns a copy of the string with all of the old letters replaced by the new letter
    - For example,

```
# consider someString = "hello world"
someString = someString.replace("l", "x")
# now someString = "hexxo worxd"
```

Sample Output

```
Elcómewó óten heten Igpén Lvísheá ránslátórtë!
(Welcome to the Pig Elvish translator!)

Please enter a word you would like to translate: gandalf
‘gandalf’ in elvish is: andalfgi

Would you like to translate another word? (y/n): y

Please enter a word you would like to translate: orc
‘orc’ in elvish is: rcoen

Would you like to translate another word? (y/n): n

Oodbyega! Aveha aen icenë ayden!
(Goodbye! Have a nice day!)
```

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.