

IDSN 599: Machine Intelligence

Lab 2

Due: 9/12, 11:59 pm

Goal

In this lab, you will analyze user input by iterating over a name the user enters and counting the vowels (AEIOU).

Setup

- Create a Python file called **lp02.py**.
- Your **lp02.py** file must begin with comments in the following format (replace the name and email with your actual information):

```
'''  
Name  
IDSN 599, Fall 2021  
USC email  
Lab practical 2  
'''
```

Requirements

Your program must perform the following:

- Ask the user for their name. If they enter nothing (meaning their input has a length of 0), quit the program.
- Once the user has entered their name analyze their input one letter at a time.
- If the letter (either uppercase or lowercase) is a vowel (AEIOU – we’re ignoring Y) increment a counter.
- Display the number of vowels you’ve counted and be sure to set that counter back to 0!
- Loop your program until the user enters an empty string.

Some Useful Hints

You can find the length of a string using the ‘len’ function like this:

```
myString = "Hello"  
strLength = len(myString)
```

You can access any character of a string using ‘indexing’. Using the two lines of code above, it looks like this:

```
i = 0  
while i < strLength:  
    print(myString[i])
```

Sample output

Below is your target output for a full run-through of the program. User input is in **red**.

```
What's your name (enter to quit)? Bob Jarvis  
That name has 3 vowels!  
What's your name (enter to quit)? Bobbernobby Hobbercobbin  
That name has 7 vowels!  
What's your name (enter to quit)? Oscar the Grouch  
That name has 5 vowels!  
What's your name (enter to quit)?
```

Deliverables

1. A compressed folder containing **lp02.py**, named **lab02.zip**. Submit to Blackboard.