

# IDSN 542: Machine Intelligence

Lab 2

Due: 9/7, 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 **lab2.py**.
- Your **lab2.py** file must begin with comments in the following format (replace the name and email with your actual information):

```
'''  
Your name  
IDSN 542, Fall 2025  
Your USC email  
Lab 2  
'''
```

## Requirements

Your program must perform the following:

- Ask the user for a 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 and X [for fun]) 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)
```

## 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)? Holy moley  
That name has 3 vowels!  
What's your name (enter to quit)? I play the xylophone  
That name has 7 vowels!  
What's your name (enter to quit)?
```

## Deliverables

1. A compressed folder containing **lab2.py**, named **lab2.zip**. Submit to Brightspace.