

Project 4

Description

Your objective is to recreate a game of hangman in Python, with Python running the game. Last week we created a function that can choose a random word from the dictionary (You can find it in my email). Now that we can choose a word, we need to write the logic to run the game. Just like in the real game, print out underscores for each unknown letter, and fill in the letters as they are guessed. There are 6 guesses in hangman (2 legs, 2 arms, body and head). So after six guesses, if the word has not been guessed, they lose. Otherwise, if they guess all of the letters at any point, they win.

Setting Up

1. If you have not already done so, create a folder somewhere on your computer where you will save all of your Python programs for the rest of this class.
2. Open up VSCode. Go to File < Open Folder, and open the folder that you created.
3. Create and save a new file named [Project4.py](#), make sure it is being saved in that folder.
4. Download the dictionary from this link. And save it in the same directory as your python file.

```
http://norvig.com/ngrams/sowpods.txt
```

5. Now you are ready to begin writing your program.

Breakdown of the Problem

Now that you are getting more experienced, try to break down the problem on your own. I assume all of you understand how hangman is supposed to work, so try to breakdown the game into a series of steps that you can implement with code. Developing this skill is the most important part of being a programmer. If you get stuck, there is plenty of help online.

Hints

I wrote this function that can display ASCII art of a hangman if you would like to use it. Pass in 6 to print the full hangman, and each number lower will take a limb off.

```
def displayHangman(num):  
    print('  +---+')  
    print('  |   |')  
    if num == 2:  
        print('  0   |')  
        print('      |')  
        print('      |')
```

```
elif num == 3:
    print(' 0 |')
    print(' /| |')
    print(' |')
elif num == 4:
    print(' 0 |')
    print(' /|\ |')
    print(' |')
elif num == 5:
    print(' 0 |')
    print(' /|\ |')
    print(' / |')
elif num == 6:
    print(' 0 |')
    print(' /|\ |')
    print(' / \ |')
else:
    print(' |')
    print(' |')
    print(' |')
print(' |')
print('=====')
```