Morse Code

Introduction:

In this lesson we will be creating a Morse Code Translator Game. This game is meant to generate a random character that is in Morse Code, and will ask the user to translate the character back into English. The user will get three tries to translate successfully. If the user fails after three tries the answer will be given and another random character will be generated. The user should be able to type “STOP” at any time, which will stop the game. We will be introduced to logical statements such as “if”, “elif” and “else”. We will also be introduced to the input and print functions. A python library will be used to store the answer key for the Morse Code alphabet that you will have to import and access. Good luck!

Useful Functions:

The primary functions that we will use are:

* print() – displays output to the user of the program through the Python IDLE shell.
* input() - gathers input from the user of the program and can be stored in a variable or used directly.
* randint(lowerBound, upperBound) – Generates a random integer as low as the lowerBound and as high as (BUT NOT INCLUDING) the upper bound.
* .upper() – attach this to the end of a String variable to make it uppercased.
* import – includes code from another python file where other variables and functions can be accessed and manipulated.
* while “CONDITION” – As long as the condition given results in a true statement, everything inside of the loop will continue to run. The condition is checked every time before the first line of the loop is repeated.

Objectives:

* The game will first print a Morse Code letter at random.
* Then the game will ask the user to enter the English letter that corresponds to the Morse Code
* If the user ever types “STOP”, the game “Goodbye!” and then will stop running.
* If the user types in the correct character, the game will print “Correct!” and then give a new Morse Code character
* If the user types in an incorrect character, the game will print “Incorrect!” and then give the user another try.
* If the user reaches three incorrect responses, the game will print “Moving on!” and then print a new Morse Code character for the user to try.