

Dr Hey and Dr Yo



Two doctors, Dr Hey and Dr Yo, scream *Hey!* and *Yo!* randomly at each other.

If a doctor screams the word **Yo!**, his volume increases by 1.

The first doctor to reach a target volume of 15 is the winner.

Task 1 Code Analysis

Copy/paste or type the starter code into your IDE. Run it and answer the following questions:

How many global variables are there?	
What happens if we call the welcome() function?	
What is the purpose of the screamWord() function?	
How many parameters does the updateVolume() function have?	
What does the first parameter of the updateVolume() function represent?	
In the game() function there is a loop. It is a while loop. While a certain condition is true, the while loop will keep looping. What is the condition?	
When the game loop is finished, a function is called. What is the name of this function?	

Task 2

In the `game()` function, create a local variable called `screamCount` and assign it a value of 0.

Inside the game's **while loop**, **after** Dr. Yo's volume is updated, add 1 to `screamCount` ie:

```
screamCount = screamCount + 1
```

We are now monitoring how many screams happen in the game!

Task 3

Let's redesign the `determineWinner()` function.

When it is called, we send it the `screamCount` data. The `determineWinner` function will use this in a sentence eg:

The 2 doctors screamed {screamCount} times!

Task 4

Run the game 5 times and complete the table:

Run Number	screamCount
1	
2	
3	
4	
5	

Explain why `screamCount` is different every time we run the program:

So we can see that the game loop repeats a different number of times each time we run the code! If we know how many times we need to repeat some code, we can use a **for** loop eg:

```
for i in range(10):  
    #do something 10 times
```

But if we want to repeat some code while a certain condition is true, we should use a **while** loop eg:

```
x = random.randint(1,10)  
  
while x != 5:  
    # do something while x is not equal to 5 eg  
    print(x)  
    x = random.randint(1,10)
```



Continue to the adaptation assignments.