

Python – Basics 7 Assignments

1. Create a Python program on repl.it with the title “SayWhat”. This program should take an input from the user and use a while loop to make sure that the response is what the program is looking for. The program should prompt the user with a yes/ no question and then use a while loop to make sure that the response is a ‘yes’ or ‘no’ (non-case sensitive) before proceeding. Once the loop has decided that the response is acceptable, there should be a response from the program about the answer.

Here is an example of the console when the program is finished (your question will be different):

```
Is ECS your favorite class? maybe
I'm sorry, I didn't get that...

Is ECS your favorite class? kinda
I'm sorry, I didn't get that...

Is ECS your favorite class? i guess
I'm sorry, I didn't get that...

Is ECS your favorite class? yes
Of course it is!
=> None
```

```
Is ECS your favorite class? not really
I'm sorry, I didn't get that...

Is ECS your favorite class? no
That's too bad...
=> None
```

<Place a screen shot of your code and the output here>

2. Create a Python program on repl.it with the title “LetItRide”. This program should generate random integers from 1 – 10 until one of the is divisible by 3. Once the number is divisible by 3, the program should count up how many numbers they went through (wins) before getting a losing number. The program should use a **break** condition in order to end the loop.

Here is an example of the console when the program is finished (your numbers will be different):

```
8
10
2
8
4
4
8
3 <<<< this one lost

You won 7 times!
=> None
```

```
10
10
5
9 <<<< this one lost

You won 3 times!
=> None
```

<Place a screen shot of your code and the output here>

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3. Create a Python program on repl.it with the title “RealCollatz” This program should do the same thing as BabyCollatz, but it should use a while loop to run the program all the way to completion. It should be able to find the entire sequence of numbers that lead to 1!

This program should look exactly like BabyCollatz, printing each new number on a separate line, but should run all the way until it reaches 1.

<Place a screen shot of your code and the output here>

4. Create a Python program on repl.it with the title “Capitalization”. This program should use a while loop to ask for all the states in which the user has traveled. The loop should also be putting the names of the states into a list. Once the user responds that they have not been to any more, the loop should end. Then the program should use a for loop to go through all the state’s names to make sure that each state has *only* the first letter capitalized (*don’t worry about 2 word states*). This is possible without, but is A LOT easier if you know String Slicing (which can be found [HERE](#)). Once the for loop is completed, the program should print the states list and tell the user how many states they have been to.

Here is an example of the console when the program is finished (your states will be different):

```
Have you traveled to any other states? arizona
Have you traveled to any other states? no
['Arizona']
You have been to 1 other states
=> None
```

```
Have you traveled to any other states? navada
Have you traveled to any other states? texas
Have you traveled to any other states? north carolina
Have you traveled to any other states? washington
Have you traveled to any other states? MASSACHUSETTS
Have you traveled to any other states? vErMoNt
Have you traveled to any other states? no
['Navada', 'Texas', 'North carolina', 'Washington', 'Massachusetts',
 'Vermont']
You have been to 6 other states
=> None
```

<Place a screen shot of your code and the output here>