

COCUS Assignment – Quality Assurance - Automation

In the exercises below we will test your capabilities of analyzing code, and coding itself, which is a requirement for most automation activities.

Notes:

- It is definitely a plus if your code comes with unit tests included!
 - Store all of your answers in a public Git repository to your liking. If you are unable to, share as a compressed file instead.
 - Please keep your responses nice and tidy, separated in folders named after the questions.
 - When appropriate, detail how to execute. Please don't forget to expose test data.
-

Exercise #1

Is there anything wrong with the Java code below? If so, can you elaborate exactly what and why? Can you propose a fix for it?

The purpose of this assignment is to test your bug hunting skills on very simple case.

```
public class Oddity {  
    public static boolean isOdd(int i) { return i % 2 == 1;  
    }  
}
```

Exercise #2

Is there anything wrong with the Python code below? What improvements do you propose?

Class MyClass:

```
def init (self):  
    self._my_dict = {"a":123, "b": True}  
  
def set_c(self, value):  
    self._my_dict["c"] = value
```

```
def get_c(self):  
    return self._my_dict["c"]  
  
def get_dict_with_twice_a(self):  
    buffer = self._my_dict  
    buffer["a"] *= 2  
    return buffer
```

Exercise #3

Devise the necessary code in any language to receive from prompt your First and Last names separated by a space and return it as a complete reverse string. Example: John Doe -> eoD nhoJ.

The intention of this exercise is to NOT use any built in methods by any framework or tool that provide this functionality, but see how you implement it.

Exercise #4

Devise the necessary code in any language to receive 3 values from prompt. Each value corresponds to the length of the side of a triangle. Values must be Int. A return in a string should be made stating what type of triangle will these values form.

Example: 3, 3, 3 -> equilateral triangle.