**Python Code Challenges: Strings (Advanced)**

**Difficult Python Code Challenges Involving Strings**

This article will help you review Python functions by providing some code challenges involving strings.

Some of these challenges are difficult! Take some time to think about them before starting to code.

You might not get the solution correct on your first try — look at your output, try to find where you’re going wrong, and iterate on your solution.

Finally, if you get stuck, use our solution code! If you “Check Answer” twice with an incorrect solution, you should see an option to get our solution code. However, truly investigate that solution — experiment and play with the solution code until you have a good grasp of how it is working. Good luck!

**Function Syntax**

As a refresher, function syntax looks like this:

def some\_function(some\_input1, some\_input2):  
  # … do something with the inputs …  
  return output

For example, a function that finds the difference in length between two Strings would look like this:

def lengthDiff(str1, str2):  
  return len(str1) - len(str2)

And this would produce output like:

>>> lengthDiff("Python", "rocks")  
1  
>>> lengthDiff("Marco", "Polo")  
1  
>>> lengthDiff("Kevin", "Durant")  
-1

**Challenges**

We’ve included 5 challenges below. Try to answer all of them and polish up your problem-solving skills!

**1. Check Name**

You are creating an app that allows users to interact and share their coding project ideas online. The first step is to provide your name in the application and a greeting for other people to see which contains your name. Let’s create a function that is able to check if a user’s name is located within their greeting. We need a function that accepts two parameters, a string for our sentence and a string for a name. The function should return **True** if the name exists within the string (ignoring any differences in capitalization). Here is what we need to do:

1. Define the function to accept two parameters, one string for the sentence and one string for the name
2. Convert all of the strings to the same case so we don’t have to worry about differences in capitalization
3. Check if the name is within the sentence. If so, then return **True**. Otherwise, return **False**

