

Pair Programming Recitation Assignment

countChars and removeT

During today's recitation, you are asked to make two functions: countChars and removeT.

You might use some basics of programming you have learned until now, such as loops, conditional statements, data types, and etc. There is more than one solution, so feel free to implement functions as you want to. Be creative!

1) countChars

Since we have learned about loops, let's use some of your knowledge.

Write a function called countChars that counts the number of characters (including dots or punctuations) in a given sentence, but NOT counting spaces. Repeat: *you should NOT count spaces!* The string will be passed in as a parameter. You may assume that the parameter will always be a single string like "I love CS1301!" For your information, there are 12 characters in "I love CS1301!" excluding spaces. You must **return** the result.

Examples:

```
>>> a = countChars("I love CS1301!")
>>> a
12

>>> b = countChars("I have a midterm on Thursday.")
>>> b
24
```

2) removeT

You are a student of Georgia Tech who must not forget one very important responsibility: exterminate all Ts in the world. Here, we are asking you to fulfill the responsibility with coding skills you have learned.

Your function's name should be removeT, and it accepts a boolean as a parameter. This boolean indicates if you are looking for lower case t's. If the parameter is False, you are only looking to filter upper case T's. If the parameter is True, you should filter BOTH upper case T's and lower case t's.

Your function should ask the user to enter a set of words or a sentence. This process will be repeated until the user types “quit”. You should store/filter all of the user's input until they type quit. (*You may store all inputs into one variable to filter Ts later, or filter T's as you go.*) When you “filter” a t or T, you should replace it with a space. The resulting (filtered) string should be returned, not printed. For example,

```
>>> removeT(True)
```

```
Enter a word/sentence you want to process: Georgia Institute of Technology
```

```
Enter a word/sentence you want to process: quit
```

```
'Georgia Ins i u e of echnology'
```

```
>>> removeT(False)
```

```
Enter a word/sentence you want to process: Georgia Institute of Technology
```

```
Enter a word/sentence you want to process: quit
```

```
'Georgia Institute of echnology'
```

```
>>> result = T(True)
```

```
Enter a word/sentence you want to process: Georgia
```

```
Enter a word/sentence you want to process: Institute
```

```
Enter a word/sentence you want to process: of
```

```
Enter a word/sentence you want to process: Technology
```

```
Enter a word/sentence you want to process: quit
```

```
>>>
```

```
>>> result
```

```
'GeorgiaIns i u eof echnology'
```