# CS 46B Introduction to Data Structures

Summer Semester 2015

Department of Computer Science San José State University Instructor: Ron Mak

## Homework #5 Recursion

Assigned:	Thursday, June 25
	Monday, June 29 at 11:59 PM (there is no draft)
read() Codecheck URL:	http://codecheck.it/codecheck/files/15062509419psp5nux3kfu2ypvk7t9da0fw
allSame() Codecheck URL:	http://codecheck.it/codecheck/files/15062509333k18e6dph2n9pejrc4o49s8ax
count() Codecheck URL:	http://codecheck.it/codecheck/files/150625093862ongmlhoag9dokoccytmfrhy
append() Codecheck URL:	http://codecheck.it/codecheck/files/1506250936devech3xgnds2e8b833tkb4qz
Canvas:	Homework 5 final
Points:	40 points max

This assignment will give you more practice thinking and programming recursively. All your methods for this assignment <u>must</u> be recursive. You may be surprised by how short they are.

## read()

Method **read()** reads and prints a text file line by line. Its parameter is a text **Scanner** object. Input will be the text file **GettysburgAddress.txt**.

## Codecheck URL:

http://codecheck.it/codecheck/files/15062509419psp5nux3kfu2ypvk7t9da0fw Input file: http://www.cs.sjsu.edu/~mak/CS46B/assignments/5/GettysburgAddress.txt

## allSame()

Method **allSame()** has a string parameter and returns true if all the characters of the string are the same, and false otherwise.

Codecheck URL: http://codecheck.it/codecheck/files/15062509333k18e6dph2n9pejrc4o49s8ax

## count()

Method **count()** has two parameters, a character and a string. It returns the number of occurrences the character is in the string (case <u>sensitive</u> comparisons).

Codecheck URL:

http://codecheck.it/codecheck/files/150625093862ongmlhoag9dokoccytmfrhy

## append()

Method **append()** has two parameters that are array lists of integers. It returns an array list that is the second array list appended to the end of the first array list.

Codecheck URL: http://codecheck.it/codecheck/files/1506250936devech3xgnds2e8b833tkb4qz

#### Final submission

Canvas: Homework 5 Final Due Monday, June 29 at 11:59 PM