**CS 121 Week 5 Worksheet - Pseudo-Code, Arrays, and File IO Practice**

Write pseudo-code for the following prompts (if you have a computer, you may type this out):

1. Write a program that outputs all the even integers in a supplied text document, called *num\_list.txt*. Your program must read in the text file, store every even number into an integer array called *evens\_list,* then print *evens\_list* out to the console. You may assume that the maximum amount of (even) numbers is 100 and that the numbers listed in *num\_list.txt* are all integers, separated already by spaces and line.

**Some key notes before you begin:**

* If you did not grab any even integers, print to console that no even integers were grabbed.
* If every number in the data file was even, notify the user that all numbers were even.
* Don't forget to note what libraries you are using for this program.
* You will need a counter to keep track of how many even numbers are actually in the list, namely because there is a great chance that *evens\_list* will be partially-filled (versus completely filled). The user does not need to put 100 numbers in the file, and if they choose to input more then only grab the first 100.

1. Write a program that outputs all the words and phrases in a supplied text document, called *word\_list.txt*, that are palindromes. Your program must read in the text file, store **ALL** the words from the text file and place them into a string array called *word\_list*. Afterwards, print out all the words in the list that are palindromes. Assume that the words and phrases in *word\_list.txt* are separated by line and the maximum amount of words and phrases in *word\_list.txt* is 50.

**Some key notes before you begin:**

* A palindrome is a word or phrase that looks the same when written backwards. For instance, *racecar*, *a but tuba*, and *b* are palindromes, but *palindrome* and *computer* are not palindromes.
* Don't forget to note what libraries you are using for this program in the pseudo-code.
* You will need to perform a for-loop for checking if a word is a palindrome.
* If we have a string called *str*, you may access a position in *str* by subscript (e.g. *str[0]* will give you the first character in the string).
* You will need a counter to keep track of how many words/phrases are actually given to you by the user's file. The maximum amount is 50, which does not mean they will always supply 50. If there are more, only grab the first 50.