In this lab, we will learn to use the following:

1. Invoke multiple function calls
2. Use default parameters within functions
3. Implement recursive functions
4. Handle exceptions

In mathematics the set of all minima and maxima are called extrema. The goal of this lab is to find the extrema of the included file. To do so, complete the following steps

1. Start by downloading the RandomValues.txt file from D2L.
2. Extract the numeric values from the file. Notice that this file contains both numeric and non-numeric values. Make sure to only analyze the numeric values. (Use exception handling here)
3. Write a recursive function that calculates the minimum value.
4. Write a recursive function that calculates the maximum value.
5. Write a function that calculates the extrema. This function should have 2 optional boolean parameters which allow for "skipping" the minimum or maximum. By default, this function should return all extrema.
    - Ex. Extrema(yourData) should return min & max
    - Ex. Extrema(yourData, False) should return only the max
    - Ex. Extrema(yourData, False, False) shouldn't return either the max or the min.

Unfortunately, your code can't include the built-in functions min() or max()
After I give you the thumbs up, upload your .py file to D2L.
Your file name should be Lab8_firstName_lastName.py

Extensions & Challenges (This is not part of your lab. It's just for fun.)

Write code to test if a word or phrase is a palindrome using a recursive function as part of this process. Use your test to print the palindromes listed on the included file.

Hint: Write two functions. A recursive function that reverses the word or phrase, and a second to test if it's a palindrome.
Hint: You'll need to remove the white space from the words during testing. However, you'll need the white space when you print (for readability).