**Programming Challenge**

These programming challenges are used as a portion of the interview process.

**Note:** There are no trick questions, however there are some ways to go above and beyond the strict requirements of the question that can speak to the creativity of the candidate.

**How to Participate**

Complete the challenges, commit and push back to your Github repository, then share the location to user “FrankOuyangQlik”. We will review your solutions in GitHub.

**Rules**

1. Submissions can be submitted in any programing language
2. Include a readme in Github describing how we can run your code. This can either be an executable, docker image, a list of instructions, etc... We just need a way to be able to run your code on our computers!
3. 3rd-party vendor libraries can be used if needed

# Programming Challenge #1 - Sorting

Generate a list of 100 random integers between 1 and 99.

Write a program to sort this list, from lowest to highest, without using a language specific method that sorts a list for you

# Programming Challenge 2 - Palindrome

A palindromic number reads the same both ways. The largest palindrome made from the product of two 2-digit numbers is 9009 = 91 × 99.

Find the largest palindrome made from the product of two 3-digit numbers.

# Programming Challenge 3 - Anagram

Devise an algorithm to determine if two strings of letters are [anagrams](https://en.wikipedia.org/wiki/Anagram). An anagram is direct word switch or word play, the result of rearranging the letters of a word or phrase to produce a new word or phrase, using all the original letters exactly once.

ex. isAnagram(Debit Card, Bad Credit) returns true

ex 2. isAnagram(Astronomer, Moon starer) returns true

ex 3. isAnagram(These churn air, The Hurricanes) returns true

ex 4. isAnagram(Dormitory, Dirty rooms) returns false