Jake Powers CS326 Random Test Quiz 02/7/19

This quiz presents the challenge of developing a random test to test a given function. I had to read through the instructions multiple times and view some piazza posts to really get a grasp of what was being asked. First I made the branch on my local repository as outlined in the instructions. I then started to look through code to see where I needed to add my code and what my interface was.

The code really tests the two functions separately so essentially this is two unit tests. The first part produces a series of random characters and returns them to the main function one at a time. I opted to enter in a set number of characters into a string and then have the random function select them. I felt that this would provide a good amount of randomness to properly perform the tests without dragging it out. A truly random test with all of the available ascii characters would have taken far too long.

The next function is a variant on the first except it is testing an entire string. I am building a random string from a select alphabet and returning it. I used a limited character set because using the whole lowercase alphabet took too long to complete, I tried. I feel that this character set was adequate to test that the function was properly tested and I could be confident that I am getting interesting values. I chose to use two e's as this was preset twice in the string that the code was looking for.

I then built and ran the code, fixed my issues then verified that my code was running and going through all of the states. The final one took some time but It eventually came up with the correct combination of characters and exited successfully.