To solve this assignment, I plan on mainly using arrays and the charCodeAt() and fromCharCode() methods. My main function, caesarEncrypt(clearText, shiftNum, shiftLeft) will follow these steps:

- Take the unencrypted string and split its elements into an array
- Using the charCodeAt() method, the function will get the ASCII code of each element in the array
- Through a series of conditionals, the function will check the ASCII code of each element in the array. If it is a non-alphanumeric character, the function will push the same element to a new array. If it is an alphanumeric character, the function will create a new array with corresponding numbers to the ASCII table. The function then assigns the index value of the ASCII code element to a variable. Using the value of shiftNum, it will loop through this new array, shifting the positions of the elements either left or right (depending on boolean value of shiftLeft). A new variable will be declared to hold the value from the adjusted ASCII array, given the previous index of the element. The function then adds this new value to the aforementioned new array.
- Using the fromCharCode() method, the function will give back the corresponding element from the ASCII code
- Ultimately, the function will return the new string which is now based on the new ASCII code positions

My second function, caesarSubstitutionAlphabet(shiftNum, shiftLeft), will follow these steps:

- Use a for loop to go over ASCII characters 33 (!) - 126 (~)
- Create a new div element for every character
- Fill in the div space with the corresponding ASCII character
- Append the div to the document
- To get the shifted character, this function will use a similar methodology to the previous function where it goes through a series of conditionals to get the correct shifted character, and then it will append it to the div.

My user interface will follow something along the lines of this:

- Have two separate event handlers: one for when the webpage loads, and another for when the user changes an input
- My event handlers will reference three different functions: one function that is specific for handling what the page looks like when it first loads, another function that will dynamically reflect the input changes made by the user onto the substitution alphabet, and another function that dynamically reflects what the ciphertext looks like depending on the changes the user makes to the input.