Describe

Problem:

Understand: We have to ask the user to input a string and allow them to choose the 5 operations that they would like to perform on their string until they would like to quit then the program will quit.

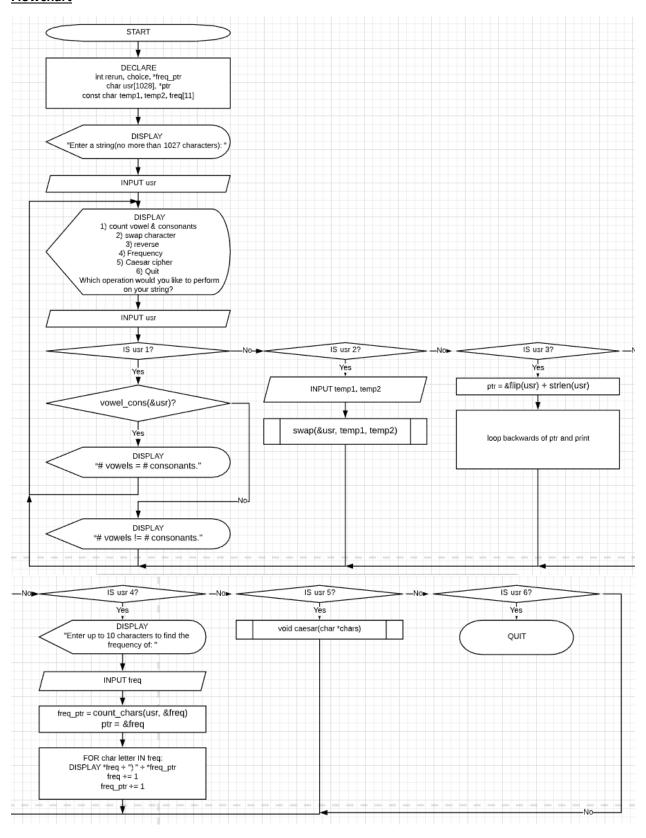
Assumptions:

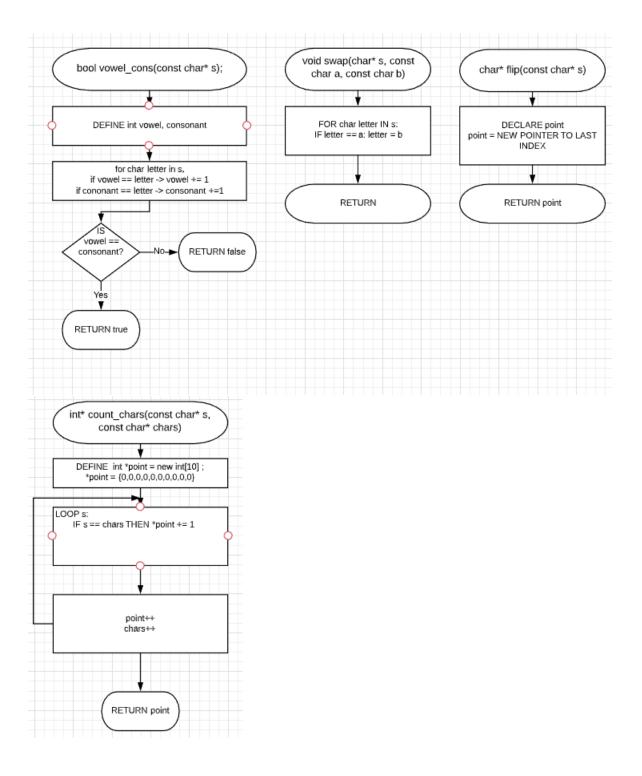
- The user will enter something that has lesser than 1027 characters
- The user might enter an option that is invalid for the 5 operations
- The user will enter an integer value for operation options

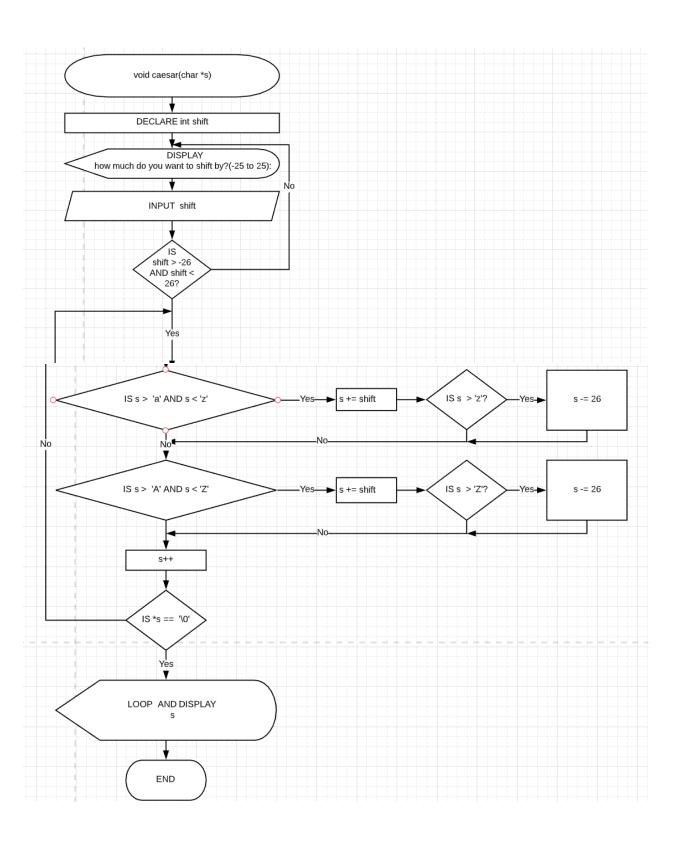
Goals:

- 1st function count if vowels and consonants equal
- 2nd function changes a character to another
- 3rd function prints out the array backwards
- 4th function checks frequency of characters of array 2 that appears at array 1
- 5th function Caesar shift

Flowchart







Test case

DISPLAY	USER INPUT	EXPECTED
DISPLAY	u u	DISPLAY
"Enter a string(no more		1) count vowel & consonants
than 1027 characters): "		2) swap character
than 1027 characters).		3) reverse
		4) Frequency
		5) Caesar cipher
		6) Quit
		Which operation would you like
		to perform on your string? (Every
		output performed will be
		" " because no letters can be
		used to operate on)
DISPLAY	"AAAAAAAAAAAAAAAAAAAAAAA	DISPLAY
"Enter a string(no more	AAAAAAAAAAAAAAAAAAAAAA	1) count vowel & consonants
than 1027 characters): "	AAAAAAAAAAAA" (1028	2) swap character
chan 1027 characters).	CHARACTERS)	3) reverse
		4) Frequency
		5) Caesar cipher
		6) Quit
		Which operation would you like
		to perform on your string?
DISPLAY	1	DISPLAY
1) count vowel &		vowel_cons(&usr)? "# vowels = #
consonants		consonants.": # vowels != #
2) swap character		consonants."
3) reverse		
4) Frequency		
5) Caesar cipher		
6) Quit		
Which operation would		
you like to perform on		
your string?		
DISPLAY	0	DISPLAY
1) count vowel &		1) count vowel & consonants
consonants		2) swap character
2) swap character		3) reverse
3) reverse		4) Frequency
4) Frequency		5) Caesar cipher
5) Caesar cipher		6) Quit
6) Quit		Which operation would you like
Which operation would		to perform on your string?
you like to perform on		
your string?		
DISPLAY	6	exit

	1	I
1) count vowel &		
consonants		
2) swap character		
3) reverse		
4) Frequency		
5) Caesar cipher		
6) Quit		
Which operation would		
you like to perform on		
your string?		
DISPLAY	2	DISPLAY
1) count vowel &		Swapped string
consonants		
2) swap character		
3) reverse		
4) Frequency		
5) Caesar cipher		
6) Quit		
Which operation would		
you like to perform on		
your string?		
DISPLAY	3	DISPLAY
1) count vowel &		Reversed string
consonants		Neversed string
2) swap character		
3) reverse		
4) Frequency		
5) Caesar cipher		
6) Quit		
Which operation would		
I The state of the		
you like to perform on		
your string?		DICDLAY
DISPLAY	4	DISPLAY
1) count vowel &		"Enter up to 10 characters to find
consonants		the frequency of: "
2) swap character		
3) reverse		
4) Frequency		
5) Caesar cipher		
6) Quit		
Which operation would		
you like to perform on		
your string?		
DISPLAY	5	DISPLAY
1) count vowel &		how much do you want to shift
consonants		by?(-25 to 25):
2) swap character		
3) reverse		

4) Frequency		
5) Caesar cipher		
6) Quit		
Which operation would		
you like to perform on		
your string?		
DISPLAY	-26	DISPLAY
how much do you want to		how much do you want to shift
shift by?(-25 to 25):		by?(-25 to 25):
DISPLAY	-25	LOOP AND DISPLAY
how much do you want to		S
shift by?(-25 to 25):		
DISPLAY	0	LOOP AND DISPLAY
how much do you want to		s
shift by?(-25 to 25):		