1. How do you decrypt a message that has been encrypted using this [XOR] scheme?
   The inverse of the XOR function is the XOR function. To decrypt it. You just need to reapply XOR
2. How do you shift left in LC3? How do you right shift in LC3?
   a. Multiply by 2 for every left shift
   b. Divide by 2 for right shifts

3.

Subroutines

Encrypt- Ran encryption subroutines

Decrypt- Ran Decryption Subroutines

Caesar- Took the keys y1 y2 y3 and added the 3 digit number y1y2y3 to each character in the message. It then took the mod128 of this result and restored them in memory

Vignenere- This took the key x1 and ran x1 XOR (character) on each character and restored them in memory

UnCaesar- caesar but it did((128-key)+(char))mod128

UnVignenere- Vignenere except it stores the values at x5000 in the decrypt memory

getKey-Stores the key values at x4100

getMsg- Stores the inputted message at x4000

checkKey- checks if the key fits the specs(1 int between 0 and 8, one non numerical char or 0, a 3 digit number between 0 and 127)

checkMsg-checks if the msg fits the specs(10 printable characters)