```python
#Lab2
#MSBA 605
#Due 9/2/18
#Description: this writes and tests a method that will pass a
#cyphertext string and a key string as parameters and return an
#associated plaintext string

def substitutionEncrypt(plainText,key): #defines the encryption function
        alphabet = "abcdefghijklmnopqrstuvwxyz "
        plainText = plainText.lower()
        cipherText = ""
        for ch in plainText:
            idx = alphabet.find(ch)
            cipherText = cipherText + key[idx]
        return cipherText

def substitutionDecrypt (cypherText, key): #defines the decryption function
        alphabet = "abcdefghijklmnopqrstuvwxyz " #copy from the substitution encryption
        plainText = cypherText.lower()
        cipherText = ""
        for ch in plainText:
            idx = alphabet.find(ch)
            if(idx==26):                #add the if/else statement here to represent the 26 letters in the alphabet
                    " "                 #for the code to decrypt
            else:
                    idx=idx%26
            ##print(idx)
            cipherText=cipherText + key[idx]
        return cipherText


# Simple Test
originalMessage = "the quick brown fox"
testKey = "zyxwvutsrqponmlkjihgfedcba "
cipher = substitutionEncrypt(originalMessage, testKey)
print("Original:  ", originalMessage)
print("Ciphertext:", cipher)

#this will print Decryption
decrypt=substitutionDecrypt(cipher,testKey)

print("Cipher is:",cipher)
print("Original is:", decrypt)
```

Results

```
Original:   the quick brown fox
Ciphertext: gsv jfrxp yildm ulc
Cipher is: gsv jfrxp yildm ulc
Original is: the quick brown fox
```