

Kennan Lyle Seno
D14123582
Lab 2

Question 1 - Caesar Cipher

```
message = "And I shall remain satisfied, and proud to ha  
thanks to that of my true Don Quixote, are even now tott  
key = -3  
print "Key: " + str(key)  
encryptedText = encrypt(message, key)  
print "Encrypted text: " + encryptedText  
print "Decrypted text: " + decrypt(encryptedText, key)
```

Line 1: variable 'message' to store the plaintext

Line 2: variable 'key' to store the key that will be used to encrypt the plaintext

Line 3: print out key

Line 4: use encrypt() function that uses the caesar cipher method and pass the message and key as arguments to produce a ciphertext and store it in the 'encryptedText' variable.

Line 5: print out ciphertext

Line 6: use decrypt() function to decrypt the cipher text by passing the 'encryptedText' variable and the key as an argument.

Output:

```
-----Q1-----  
Key: -3  
Encrypted text: Xka F pexii objxfk pxqfpcfba, xka molra ql exsb ybbk qeb cfopq tel exp bsbo bkglvba qeb corfq lc efp tofqkdp xp cr  
iiv xp eb zlrta abpfob; clo jv abpfob exp ybbk kl lqebo qexk ql abifsbo lsbo ql qeb abqbpqxqfk lc jxkhfka qeb cxipb xka cllifpe qx  
ibp lc qeb yllhp lc zefsxiov, tefze, qexkhp ql qexq lc jv qorb Alk Nrfulqb, xob bsbk klt qlqqbofkd, xka alryqibpp alljba ql cxii cl  
o bsbo. Cxobtbii.  
Decrypted text: And I shall remain satisfied, and proud to have been the first who has ever enjoyed the fruit of his writings as fu  
lly as he could desire; for my desire has been no other than to deliver over to the detestation of mankind the false and foolish ta  
les of the books of chivalry, which, thanks to that of my true Don Quixote, are even now tottering, and doubtless doomed to fall fo  
r ever. Farewell.
```

Question 2 - Caesar Cipher

```
encryptedText = "Vg jbyhq frrz gung, nf ur rknzvarq gur frireny  
key = 13  
print "Key: " + str(key)  
print "Decrypted text: " + decrypt(encryptedText, key)
```

Line 1: variable 'encryptedText' to store the ciphertext

Line 2: variable 'key' to store the key that will be used to decrypt the ciphertext

Line 3: print out key

Line 4: using the decrypt() function, decrypt the ciphertext by passing it as an argument together with the key.

Output:

```
-----Q2-----  
Key: 13  
Decrypted text: It would seem that, as he examined the several possibilities, a suspicion crossed his mind: the memory of how he hi  
mself had behaved in earlier days made him ask whether someone might be hiding her from the world
```

Question 3 - Vigenere Cipher

```
key = "PASSWORD"  
message = "I shall (from now on) select and take the ingots individually in my own yard,  
encryptedText = encrypt(message, key)  
print "Encrypted text: " + encryptedText
```

Line 1: variable 'key' to store the key that will be used for encrypting plaintext

Line 2: variable 'message' to store plaintext

Line 3: use encrypt() function to encrypt the plaintext by passing the message and key as arguments then store ciphertext in 'encryptedText' variable.

Line 4: Print out ciphertext

Output:

```
-----Q3-----  
Encrypted text: X szshz (wudn fgs ce) vtlwup oeg iacw pvv lcglo wegxvavqocon if eu cnq najv, wbu L hhsdh sohgcaka oxdxnl ucl pn raydh fi gebwyhzrc bwuwijh nom zwjv wgeslar dh lilz ycewtahl.
```

Questions 4 - Vigenere Cipher

```
message = "Yhwvtroi, 28 Yudq 2016 - Pse bjabat pt foxgf zwjzql bgio qcwelwlar, bls  
fnf xicgo lhg sns yxstuqfb oxs fakdsipjn qj uvs uxny zwjv gjskwusr pgoe zqbklsq,  
smhwy qgdogsdn, lzam nlql nmws poitwj wbu ptrg lbddsay"  
key = "FACEBOOKPASSWORD"  
print "Decrypted text: " + decrypt(message, key)
```

Line 1: variable 'message' where the ciphertext is stored

Line 2: variable 'key' where the key to decrypt the ciphertext is stored

Line 3: use decrypt() function that uses the vigenere cipher and pass the message and key variable as arguments and print out the decrypted text

Output:

```
-----04-----  
Decrypted text: Thursday, 28 July 2016 - Ten years of reign having been completed, King Diodotus made known the doctrine of piety to men; and from this moment he has made men more pious, and everything thrives throughout the whole world.  
and the king abstains from killing living beings, and other men and those who are huntsmen and fishermen of the king have desisted from hunting, and if some were intemperate, they have ceased from their intemperance as was in their power  
; and obedient to their father and mother and to the elders, in opposition to the past also in the future, by so acting on every occasion, they will live better and more happily
```