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Course, BCA 6C

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Question 3

```
def generateKey (string, Key):  
    Key = list(Key)  
    if len(string) == len(Key):  
        return(Key)  
  
    else:  
        for i in range (len(string) - len(Key)):  
            Key.append (Key[i % len(Key)])  
  
    return (" ".join(Key))  
  
def cipher (string, Key):  
    cipher_text = []  
    for i in range (len(string)):  
        x = (ord(string[i]) + ord(Key[i])) % 26  
        x += ord('A')  
        cipher_text.append (chr(x))  
    return (" ".join(cipher_text))  
  
def org (cipher_text, Key):  
    org_text = []  
    for i in range (len(cipher_text)):  
        x = (ord(cipher_text[i]) - ord(Key[i]) + 26) % 26  
        x += ord('A')  
        org_text.append (chr(x))  
    return (" ".join(org_text))  
  
string = 'Cryptography'  
keyw = "Monarchy"  
Key = generateKey (string, keyw)  
cipher_text = cipher (string, Key)  
print "Cipher: " + cipher_text  
print "Decipher: " + org (cipher_text, Key)
```