In [3]:

```
#A python program to illustrate Caesar Cipher Technique
def encrypt(message,key):
    result = ""

    # traverse text
    for i in range(len(message)):
        char = message[i]

        # Encrypt uppercase characters
        if (char.isupper()):
            result += chr((ord(char) + key-65) % 26 + 65)
#             print(result)

        # Encrypt lowercase characters
        elif char.islower():
            result += chr((ord(char) + key - 97) % 26 + 97)

        else:
            result += char
    return result

#check the above function
message = "middle-Outz"
key = 2
print ("Text  : " + message)
print ("Key   : " + str(key))
print ("Cipher: " + encrypt(message,key))
```

```
Text  : middle-Outz
Key   : 2
Cipher: okffng-Qwvb
```

In [42]:

```
def marsExploration(s):
    count = 0
#     length = len(s)/3
#     print(length)
    x = 'SOS'
    for i in range(0, len(s), 3):
        print(s[3])
        print(s[4])
        print(s[5])
        if s[i] == 'S' and s[i+1] == 'O' and s[i+2] == 'S':
            count+=1

    return int(len(s)/3 - count)

s = 'SOSSPSSQSSOR'

print(marsExploration(s))
```

```
S
P
S
S
P
S
S
P
S
S
P
S
3
```

In [1]:

```
def caesarCipher(s, k):
    y='abcdefghijklmnopqrstuvwxyz'
    z=y[k:]+y[0:k]
    p='ABCDEFGHIJKLMNOPQRSTUVWXYZ'
    q=p[k:]+p[0:k]
    r=''
    d={}
    for i,j in zip(y,z):
        d[i]=j
    for i,j in zip(p,q):
        d[i]=j
    for i in s:
        if i in d:
            r=r+d[i]
        else:
            r=r+i
    return r
```

In [21]:

```
caesarCipher('abc', 26)
```

Out[21]:

```
'abc'
```

In [ ]:

```
def encrypt(message,key):
    result = ""

    for i in range(len(message)):
        char = message[i]

    if (char.isupper()):
            result += chr((ord(char) + key-65) % 26 + 65)
#             print(result)

        elif char.islower():
            result += chr((ord(char) + key - 97) % 26 + 97)

        else:
            result += char
    return result

message = "middle-Outz"
key = 2
print ("Text  : " + message)
print ("Key   : " + str(key))
print ("Cipher: " + encrypt(message,key))
```