

Cryptography

Day 5 Assignment

In [2]:

```
!pip install cryptography
```

```
Requirement already satisfied: cryptography in c:\users\priya\anaconda3\lib\site-packages (3.1.1)
Requirement already satisfied: six>=1.4.1 in c:\users\priya\anaconda3\lib\site-packages (from cryptography) (1.15.0)
Requirement already satisfied: cffi!=1.11.3,>=1.8 in c:\users\priya\anaconda3\lib\site-packages (from cryptography) (1.14.3)
Requirement already satisfied: pycparser in c:\users\priya\anaconda3\lib\site-packages (from cffi!=1.11.3,>=1.8->cryptography) (2.20)
```

In [3]:

```
from cryptography.fernet import Fernet
```

In [4]:

```
def generatepasskey():
    key = Fernet.generate_key()
    print(key)
    print(type(key))
    abc = open("dharakey.key", "wb")
    abc.write(key)
    abc.close
```

In [6]:

```
generatepasskey()
```

```
b'6BdXUVHFigqtoukZPsTkkcp8YXAUJw2xCE-2WZNTbMc='
<class 'bytes'>
```

In [8]:

```
def Getmykey():
    abc=open("dharakey.key", "rb")
    return abc.read()
```

In [9]:

```
Getmykey()
```

Out[9]:

```
b'6BdXUVHFigqtoukZPsTkkcp8YXAUJw2xCE-2WZNTbMc='
```

In [11]:

```
def getcontentfromuser():
    return input("Enter the content you want to Encrypt in your python scripts")
```

In [12]:

```
getcontentfromuser()
```

Enter the content you want to Encrypt in your oython scriptsDontgiveup

Out[12]:

```
'Dontgiveup'
```

In [17]:

```
def encryptmessage(normal_message):  
    key = Getmykey()  
    k = Fernet(key)  
    encrypted_message = k.encrypt(normal_message)  
    return encrypted_message
```

In [18]:

```
encryptmessage(b"hey!how are you")
```

Out[18]:

```
b'gAAAAABf3EKaccSi20hFo-Xmv0PTg7103XkQmjdf14d5J0fXNgfyfmLOFKNGpGu98mgpeKgS_Q  
ehFC3It5WKmQs-i1qTZD7d4A=='
```

In [19]:

```
def decryptmessage(message_secret):  
    key = Getmykey()  
    k = Fernet(key)  
    decrypted_message = k.decrypt(message_secret)  
    return decrypted_message
```

In [20]:

```
decryptmessage(b'gAAAAABf3EKaccSi20hFo-Xmv0PTg7103XkQmjdf14d5J0fXNgfyfmLOFKNGpGu98mgpeKgS_Q
```

Out[20]:

```
b'hey!how are you'
```

In []: