In [1]:
```
!pip install PyCryptodome
```

```
Requirement already satisfied: PyCryptodome in c:\users\vishal tanaw
ade\appdata\local\programs\python\python310\lib\site-packages (3.14.
1)
WARNING: You are using pip version 22.0.4; however, version 22.1 is
available.
You should consider upgrading via the 'C:\Users\Vishal Tanawade\AppD
ata\Local\Programs\Python\Python310\python.exe -m pip install --upgr
ade pip' command.
```

In [2]:
```
from Crypto.Cipher import AES
from secrets import token_bytes
```

In [4]:
```
key = token_bytes(16)
```

In [13]:
```
def encrypt(msg):

    """In cryptography, a nonce ( number once) is an arbitrary number
    can be used just once in a cryptographic communicationIn cryptogr
    sometimes known as a tag, is a short piece of information used to
    """
    cipher = AES.new(key,AES.MODE_EAX)
    nonce = cipher.nonce
    ciphertext,tag = cipher.encrypt_and_digest(msg.encode('ascii'))
    return nonce,ciphertext,tag
```

In [14]:
```
def decrypt(nonce,ciphertext,tag):
    cipher = AES.new(key,AES.MODE_EAX,nonce = nonce)
    plaintext = cipher.decrypt(ciphertext)

    try:
        cipher.verify(tag)
        return plaintext.decode('ascii')
    except:
        return False
```

In [15]:
```
nonce,ciphertext,tag = encrypt(input("Enter a message: "))
plaintext = decrypt(nonce,ciphertext,tag)

print("Cipher text: ", ciphertext)

if not plaintext:
    print('Message is corrupted!!!')
else:
    print("Plain text: ", plaintext)
```

```
Enter a message: Vishal tanawade
Cipher text:  b'w4{\x00\xa0\xad\x00i\x1b\xba\xc5:\xca"['
Plain text:  Vishal tanawade
```

In [ ]:
```

```

Loading [MathJax]/extensions/Safe.js