In [ ]:
```
'''Conduct an experiment to encrypt and decrypt given sensitive data Use the
cryptography library fernet.'''
```

In [1]:
```
pip install cryptography
```

```
Requirement already satisfied: cryptography in c:\users\dell\anaconda3\lib\site-pa
ckages (39.0.1)
Requirement already satisfied: cffi>=1.12 in c:\users\dell\anaconda3\lib\site-pack
ages (from cryptography) (1.15.1)
Requirement already satisfied: pycparser in c:\users\dell\anaconda3\lib\site-packa
ges (from cffi>=1.12->cryptography) (2.21)
Note: you may need to restart the kernel to use updated packages.
```

In [10]:
```
from cryptography.fernet import Fernet, MultiFernet
```

In [32]:
```
key1 = Fernet(Fernet.generate_key())
key2 = Fernet(Fernet.generate_key())

f=MultiFernet([key1,key2])

tok=f.encrypt(b"Hi this is meenakshi")
```

In [20]:
```
print(tok)
```

```
b'gAAAAABmtEMEGqwo0NhXbdCmb8eYqiAJliOrRRxFOBcLrk6DNMEZ62U9BZm4UCAyE9_a8GH4VRRpgLEF
Lgcm34_UzoRD5QVkQSbY3njV_LGbvkTurgwG8Vw='
```

In [21]:
```
text=f.decrypt(tok)
```

In [7]:
```
print(text)
```

```
b'Hi this is meenakshi'
```

In [15]:
```
print(text.decode())
```

```
Hi this is meenakshi
```

In [29]:
```
from cryptography.fernet import Fernet, MultiFernet
key1 = Fernet.generate_key()#key generation
f=Fernet(key1)#key's object
tok=f.encrypt(b"Hi this is my first encryption")#encrption
print(tok)#cypher text
```

```
b'gAAAAABmtEMr4Tgqkop2q5SM9xs7sgEYf1pc4aE3pjmVxx72w3RwTJIg6ePSRWvmbBouohV60IOAlYYk
rvCdPtxKYgrIoPDPERq9kk2uuOeMR_zmZhZhf-4='
```

In [30]:
```
text=f.decrypt(tok)
```

In [31]:
```
plain_txt=text.decode()
print(plain_txt)
```

```
Hi this is my first encryption
```