

File - 1Cesser Cipher

```
1 "C:\Program Files\Python312\python.exe" "F:\Sem\8th
  sem\Information security\1Cesser Cipher .py"
2 Text : COME AT HALF PAST SIX
3 Shift : 2
4 Cipher: EQ0GpCVpJCNHpRCUVpUKZ
5
6 Process finished with exit code 0
```

File - 2playfaircipher

```
"C:\Program Files\Python312\python.exe" "F:\Sem\8th sem\
Information security\2playfaircipher.py"
Key Matrix:
['S', 'E', 'C', 'U', 'R']
['A', 'B', 'D', 'F', 'G']
['H', 'I', 'K', 'L', 'M']
['N', 'O', 'P', 'Q', 'T']
['V', 'W', 'X', 'Y', 'Z']

Original: INFORMATION SYSTEM
Encrypted: HOBQGTGNOWVAVUORKZ
Decrypted: INFORMATIONSYSTEMX
```

File - 3RailFence

```
1 "C:\Program Files\Python312\python.exe" "F:\Sem\8th
  sem\Information security\3RailFence.py"
2 Original Message : I WILL PASS EXAM
3 Encrypted Message: IPXISMLEXWAALSX
4 Decrypted Message: ILLIWPESSAXXXMA
-
```

● (env) PS F:\Sem\8th sem\Information security> python 4DES.py
Encrypted (hex): 5ebf1720e60c6c38a9d5a98e50956620
Decrypted: Hello Student

✧ (env) PS F:\Sem\8th sem\Information security> █

(env) PS F:\Sem\8th sem\Information security> py 5AES.py

- Original Message : Good Morning ALL
Encrypted (hex) : 79072ff897fbc98ef7053a8e702afdb40dc6ebb1a8a776976152363ce8a8ea16
Decrypted Message: Good Morning ALL
- (env) PS F:\Sem\8th sem\Information security> █

File - 6gcd

```
"C:\Program Files\Python312\python.exe" "F:\Sem\8th sem
\Information security\6gcd.py"
GCD of 31 and 2 is: 1
```

```
7primalitytest x
"C:\Program Files\Python312\python.exe" "F:\Sem\8th sem\Information security\7primalitytest.py"
Fermat's Primality Test Results:
5: Probably Prime
21: Composite
30: Composite
61: Probably Prime
561: Composite
```

```
(env) PS F:\Sem\8th sem\Information security> py 8RSA.py
The value of z = 20
The value of e = 3
The value of d = 7
Encrypted message is: 12
Decrypted message is: 12
(env) PS F:\Sem\8th sem\Information security> █
```

```
(env) PS F:\Sem\8th sem\Information security> py 9md5.py
Original Text:
come home tomorrow
Hash of Original Text:
4058321c4d4a0b8fbb77fb72a394213e
```

```
Modified Text:
come home tomorrow.
Hash of Modified Text:
7b7d648fa0aad0956eb5e27ba32e961a
```

```
Reverted Text:
come home tomorrow
Hash of Reverted Text:
4058321c4d4a0b8fbb77fb72a394213e
```

```
(env) PS F:\Sem\8th sem\Information security> █
```

```
(env) PS F:\Sem\8th sem\Information security> py 10sha56.py
Original Message: STUDY INFOSEC
SHA256 Hash: c8460104eb47cb30f959eb41074d4837000369f68b3f0a29c1f0daee1b4f3919
Length of Hash: 64 hexadecimal characters
```

```
Changed Message: STUDE INFOSEC
SHA256 Hash: 67ce9ede7df62f3de990f7b2ea65e4e9fe2ce5d920d64151f23c998a23e20dc6
Length of Hash: 64 hexadecimal characters
```

```
Are the two hashes different? True
```

```
(env) PS F:\Sem\8th sem\Information security> █
```