

NAMA : Taufiq Hidayah

NIM : 2101720901

---

Client

```
import socket

def encrypt(string, shift):

    cipher = ""

    for char in string:

        if char == ' ':

            cipher = cipher + char

        elif char.isupper():

            cipher = cipher + chr((ord(char) + shift - 65) % 26 + 65)

        else:

            cipher = cipher + chr((ord(char) + shift - 97) % 26 + 97)

    return cipher

# text = input("enter string: ")

# s = int(input("enter shift number: "))

# print("original string: ", text)

# print("after encryption: ", encrypt(text, s))
```

```
s = socket.socket()

s.connect(('127.0.0.1',12345))

print("Connection initialed...")

print("Type exit to finish sending data")

while True:

    print("Enter your message:")

    print("This is a new message")

    str = input("Enter the key number 1-26 \n ")

    # if s.str()

    s.send(str.encode())

    if(str == 0):

        s.send(str.encode())

        break

    # print ("N:",s.recv(1024).decode())

s.close()
```

Server

```
import socket

import datetime

def encrypt(string, shift):

    cipher = "
```

```
for char in string:

    if char == ' ':

        cipher = cipher + char

    elif char.isupper():

        cipher = cipher + chr((ord(char) + shift - 65) % 26 + 65)

    else:

        cipher = cipher + chr((ord(char) + shift - 97) % 26 + 97)

return cipher

s = socket.socket()

port = 12345

s.bind(('', port))

s.listen(5)

c, addr = s.accept()

print ("Socket Up and running with a connection from",addr)

print(datetime.datetime.now())

while True:

    date = datetime.datetime.now()

    rcvdData = c.recv(1024).decode()

    print ("S:",rcvdData)

    text = ("This is a new message")

    # enc = encrypt(text, int(rcvdData))

    print("coded message: %s" % encrypt(text, int(rcvdData)))
```

```

print("encode message: %s " % text)

print(date)

# sendData = input("N: ")

conv= str(rcvdData)

f= open("hasil.txt","a+")

f.write(str(rcvdData)+' ','+str(date) + ','+encrypt(text, int(rcvdData))+'\n')

# c.send(sendData.encode())

if(int(rcvdData)==0):

    break

c.close()

```

## Result

```

1 import socket
2 import datetime

3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19 port = 12345

```

Terminal Output:

```

Enter your message:
This is a new message
Enter the key number 1-26
4
Enter your message:
This is a new message
Enter the key number 1-26
2
Enter your message:
This is a new message
Enter the key number 1-26
5
Enter your message:
This is a new message
Enter the key number 1-26
exit
Enter your message:
This is a new message
Enter the key number 1-26
0
Enter your message:
This is a new message
Enter the key number 1-26
exit

```

Server Output:

```

2019-03-27 15:43:16.865989
Taufiq@DESKTOP-6LDSOE3 MINGW64 /e/Document/BINUS/SEM 4/Network Programming
$ python server2.py
Socket Up and running with a connection from ('127.0.0.1', 57828)
2019-03-27 15:43:58.468324
S: 3
coded message: WkLv ly d qhz phvvdjh
encode message: This is a new message
2019-03-27 15:43:58.468324
S: 4
coded message: XlMw mw e ria qiwweki
encode message: This is a new message
2019-03-27 15:43:59.937067
S: 2
coded message: Vjku ku c pgy opuucig
encode message: This is a new message
2019-03-27 15:44:00.749516
S: 0
coded message: This is a new message
encode message: This is a new message
2019-03-27 15:44:01.265151

```

## FILE PROCESSING

```
3server.py x server2.py • hasil.txt x d8:c4:6a:a6:66:73 • Silakan baca materi GSLC (ppt/textbook) untuk sesi
1 3,2019-03-27 15:47:07.356889,Wklv lv d qhz phvvdjh
2 4,2019-03-27 15:47:18.361700,Xlmw mw e ria qiwweki
3 2,2019-03-27 15:47:18.799171,Vjku ku c pgy oguucig
4 5,2019-03-27 15:47:19.471064,Ymnx nx f sjb rjxxflj
5
```