

Program 4

- i. Using UDP sockets, write a client-server program to make client sending the file name and the server to send back the contents of the requested file if present.

- ii. Procedure

clientUDP.py

```
from socket import *
```

```
serverName = "127.0.0.1"
```

```
serverPort = 12000
```

```
clientSocket = socket(AF_INET, SOCK_DGRAM)
```

```
sentence = input("\nEnter file name: ")
```

```
clientSocket.sendto(bytes(sentence,"utf-8"),(serverName, serverPort))
```

```
filecontents,serverAddress = clientSocket.recvfrom(2048)
```

```
print ("\nReply from Server:\n')
```

```
print (filecontents.decode("utf-8"))
```

```
# for i in filecontents:
```

```
    # print(str(i), end = ")
```

```
clientSocket.close()
```

```
clientSocket.close()
```

serverUDP.py

```
from socket import *
```

```
serverPort = 12000
```

```
serverSocket = socket(AF_INET, SOCK_DGRAM)
```

```
serverSocket.bind(("127.0.0.1", serverPort))
```

```
print ("The server is ready to receive")
```

```
while 1:
```

```
    sentence, clientAddress = serverSocket.recvfrom(2048)
```

```
    sentence = sentence.decode("utf-8")
```

```
    file=open(sentence,"r")
```

```
    con=file.read(2048)
```

```
    serverSocket.sendto(bytes(con,"utf-8"),clientAddress)
```

```
    print ("\nSent contents of', end = ' ')
```

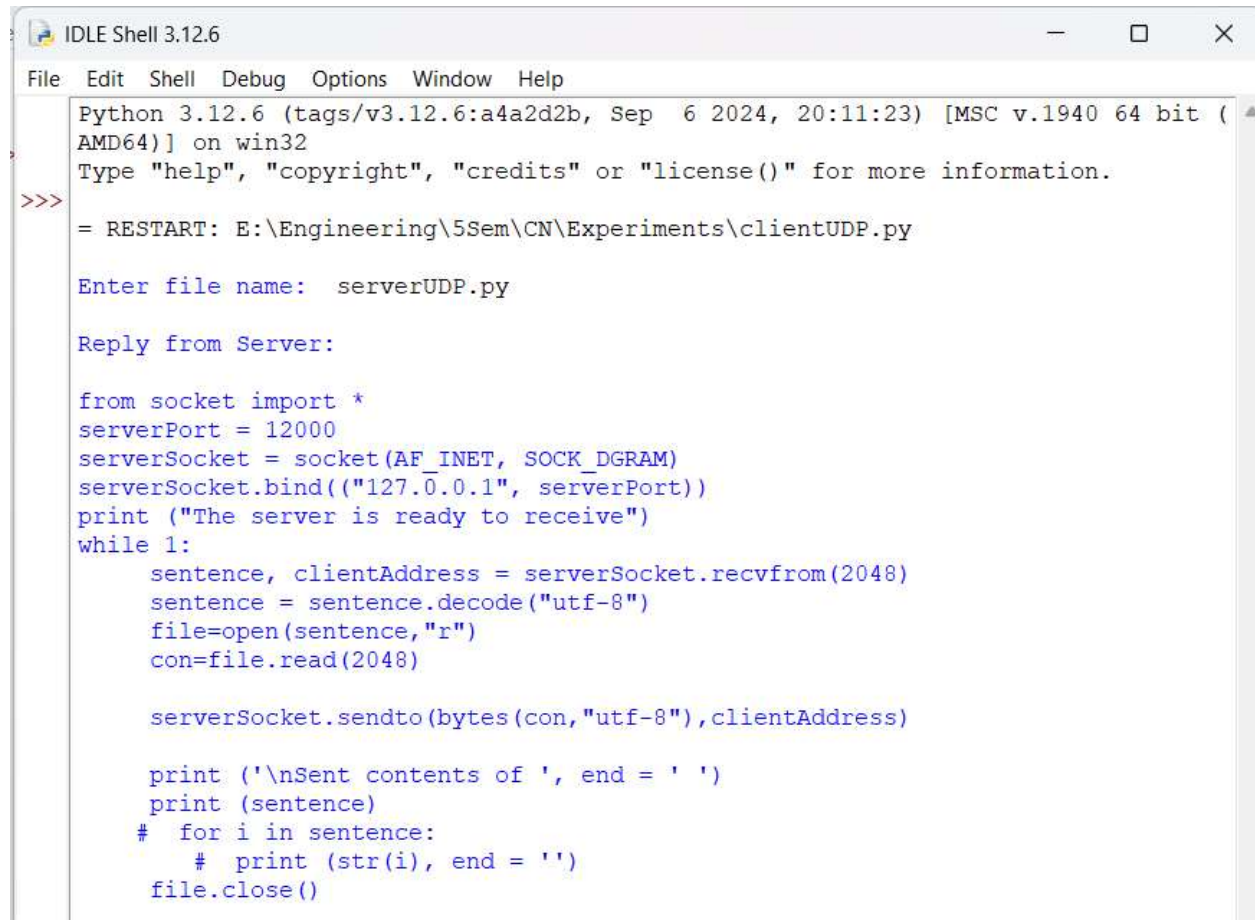
```
    print (sentence)
```

```
# for i in sentence:
```

```
# print (str(i), end = ")
file.close()
```

iii. Screen shots/ output

Client



```
IDLE Shell 3.12.6
File Edit Shell Debug Options Window Help
Python 3.12.6 (tags/v3.12.6:a4a2d2b, Sep 6 2024, 20:11:23) [MSC v.1940 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: E:\Engineering\5Sem\CN\Experiments\clientUDP.py

Enter file name: serverUDP.py

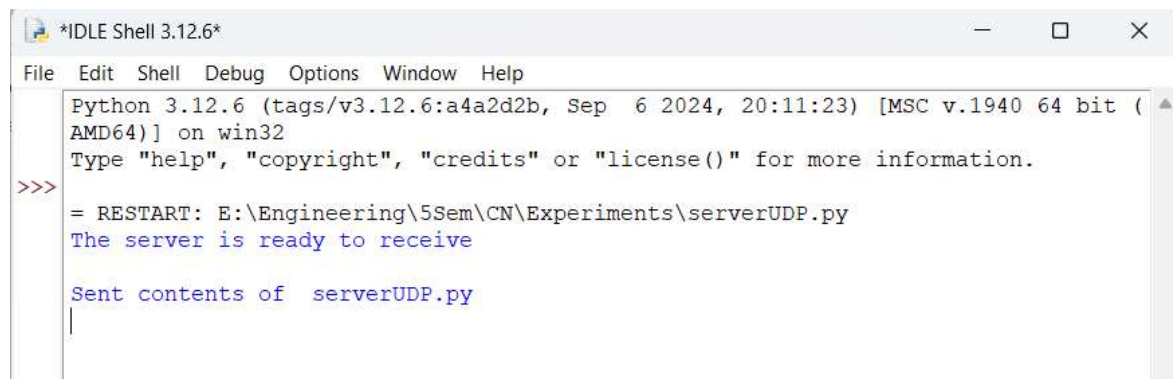
Reply from Server:

from socket import *
serverPort = 12000
serverSocket = socket(AF_INET, SOCK_DGRAM)
serverSocket.bind(("127.0.0.1", serverPort))
print ("The server is ready to receive")
while 1:
    sentence, clientAddress = serverSocket.recvfrom(2048)
    sentence = sentence.decode("utf-8")
    file=open(sentence,"r")
    con=file.read(2048)

    serverSocket.sendto(bytes(con,"utf-8"),clientAddress)

    print ('\nSent contents of ', end = ' ')
    print (sentence)
    # for i in sentence:
    #     print (str(i), end = '')
    file.close()
```

Server



```
*IDLE Shell 3.12.6*
File Edit Shell Debug Options Window Help
Python 3.12.6 (tags/v3.12.6:a4a2d2b, Sep 6 2024, 20:11:23) [MSC v.1940 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: E:\Engineering\5Sem\CN\Experiments\serverUDP.py
The server is ready to receive

Sent contents of serverUDP.py
|
```