WEEK 15

Using TCP/IP 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.

CODE:

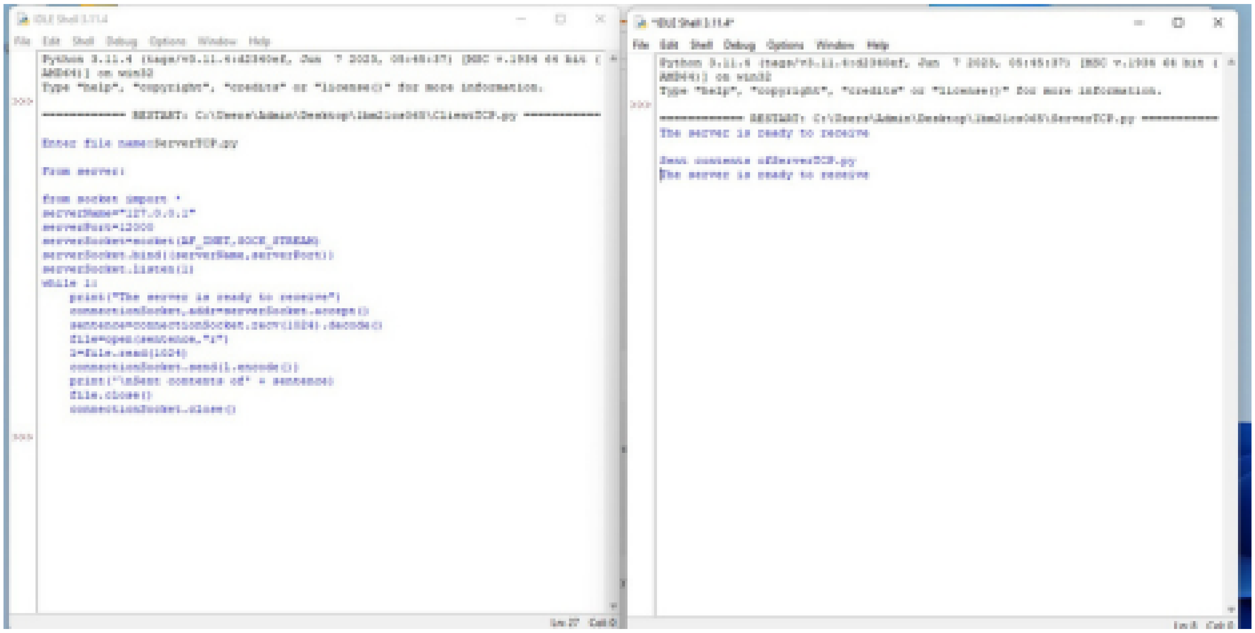
ClientTCP.py

```
from socket import *
serverName = “127.0.0.1”
serverPort = 12000
clientSocket = socket(AF_INET, SOCK_STREAM)
clientSocket.connect((serverName,serverPort))
sentence = input(“\nEnter file name: “)
clientSocket.send(sentence.encode())
filecontents = clientSocket.recv(1024).decode()
print (“\nFrom Server:\n”)
print(filecontents)
clientSocket.close()
```

ServerTCP.py

```
from socket import *
serverName=”127.0.0.1”
serverPort = 12000
serverSocket = socket(AF_INET,SOCK_STREAM)
serverSocket.bind((serverName,serverPort))
serverSocket.listen(1)
while 1:
print (“The server is ready to receive”)
connectionSocket, addr = serverSocket.accept()
sentence = connectionSocket.recv(1024).decode()
file=open(sentence,”r”)
l=file.read(1024)
connectionSocket.send(l.encode())
print (“\nSent contents of “ + sentence)
file.close()
connectionSocket.close()
```

OUTPUT:



```
Python 3.11.4 (tags/v3.11.4:d2340ef, Jun  7 2023, 05:45:37) [MSC v.1934 64 bit (
AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
============ RESTART: C:\Users\Admin\Desktop\[illegible]\ClientTCP.py ============

Enter file name:ServerTCP.py

From server:

from socket import *
serverName="127.0.0.1"
serverPort=12000
serverSocket=socket(AF_INET,SOCK_STREAM)
serverSocket.bind((serverName,serverPort))
serverSocket.listen(1)
while 1:
    print("The server is ready to receive")
    connectionSocket,addr=serverSocket.accept()
    sentence=connectionSocket.recv(1024).decode()
    file=open(sentence,"r")
    l=file.read(1024)
    connectionSocket.send(l.encode())
    print("\nSent contents of" + sentence)
    file.close()
    connectionSocket.close()

>>>
```

```
Python 3.11.4 (tags/v3.11.4:d2340ef, Jun  7 2023, 05:45:37) [MSC v.1934 64 bit (
AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
============ RESTART: C:\Users\Admin\Desktop\[illegible]\ServerTCP.py ============
The server is ready to receive

Sent contents ofServerTCP.py
The server is ready to receive
```

OBSERVATION:

Date 24/ 8/ 23
Page

* Using TCP/IP 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.

Client TCP.py

```
from Socket import*
Server Name = '127.0.0.1'
 Server port = 12000
 Client Socket = Socket (AF_INET, SOCK_STREAM)
  Client Socket. Connect (Server Name, ServerPort)
   Sentence = input ("\nEnter file name:")

  Client Socket. Send (Sentence encode ())
   filecontents = clientSocket recv (1024). decode ()
    print ("\n FromServer:\n")
     print (file contents)
     client Socket.Close()
```

Server TCP. py.

```
from Socket import*
ServerName = "127.0.0.1"
 Server port = 12000
  Server Socket = Socket (AF_INET, SOCK_STREAM)
  Server Socket . bind ((ServerName, ServerPort))
  Server Socket, listen(1)
   While 1:
```

```
file=open (sentence , "r")
    l = file, read (1024)
connection Socket . send ( l. encode())
print( "\n Sent contents of' + Sentence)
        file, close ()
        Connection Socket . close ()
```

Output

```
Server is ready to recieve
```

In client

```
   Enter file name : Server TCP.py
                  final server details will come
```

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

Client UDP. py

```
   from Socket import *
        Server Name = "127.0.0.1'
        Serverport = 12000
        clientSocket = Socket (AF_INET, SOCK_DGRAM
```