WEEK15

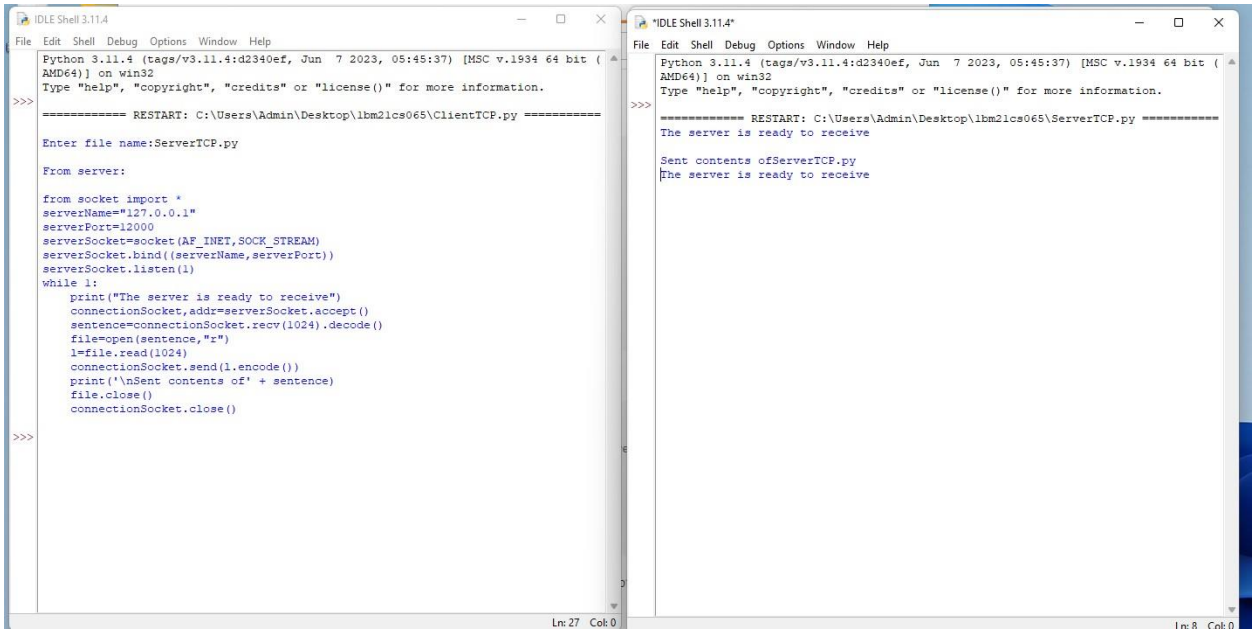
Using TCP/IP sockets, write a client-server program to make client sending the file name and the server to send back the contents of the requested file if present.

CODE:

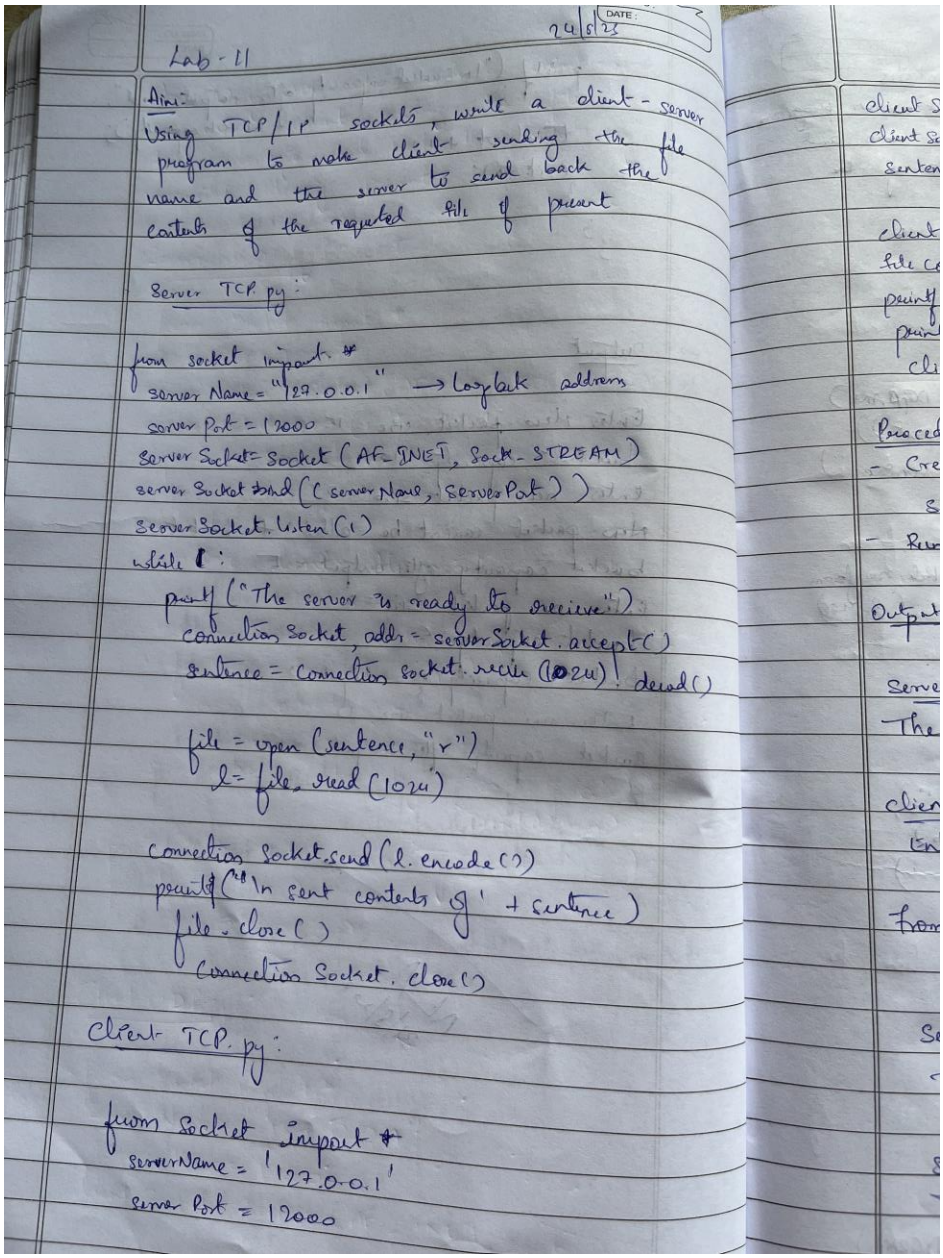
ClientTCP.py from socket import * serverName = “127.0.0.1” serverPort = 12000 clientSocket = socket(AF_INET, SOCK_STREAM) clientSocket.connect((serverName,serverPort)) sentence = input(“\nEnter file name: “) clientSocket.send(sentence.encode()) filecontents = clientSocket.recv(1024).decode() print (“\nFrom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


IDLE Shell 3.11.4
File Edit Shell Debug Options Window Help
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\lbm2lcs065\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()
>>>
Ln: 27 Col: 0
IDLE Shell 3.11.4
File Edit Shell Debug Options Window Help
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\lbm2lcs065\ServerTCP.py ==========
The server is ready to receive
Sent contents ofServerTCP.py
The server is ready to receive
Ln: 8 Col: 0

OBSERVATION:



Lab - 11

DATE: 24/8/23

Aim:
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

Server TCP.py:

```
from socket import *
serverName = "127.0.0.1"  → Loopback address
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("\n Sent contents of " + sentence)
    file.close()
    connectionSocket.close()
```

Client TCP.py:

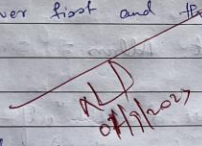
```
from socket import *
serverName = '127.0.0.1'
serverPort = 12000
```

clientSocket = socket(AF_INET, SOCK_STREAM)
clientSocket.connect((serverName, serverPort))
sentence = input("\n Enter file name:")

clientSocket.send(sentence.encode())
fileContents = clientSocket.recv(1024).decode()
print("\n From Server:\n")
print(fileContents)
clientSocket.close()

Procedure:
- Create 2 IDLE instance and write client and server files
- Run server first and then the client.

Output:



Server Instance:
The server is ready to receive

client Instance:-
Enter file name: serverTCP.py

From server:
the contents of serverTCP.py is displayed here

Server Instance:-
The server is ready to receive

Sent contents of server TCP.py
The Server is ready to receive.