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

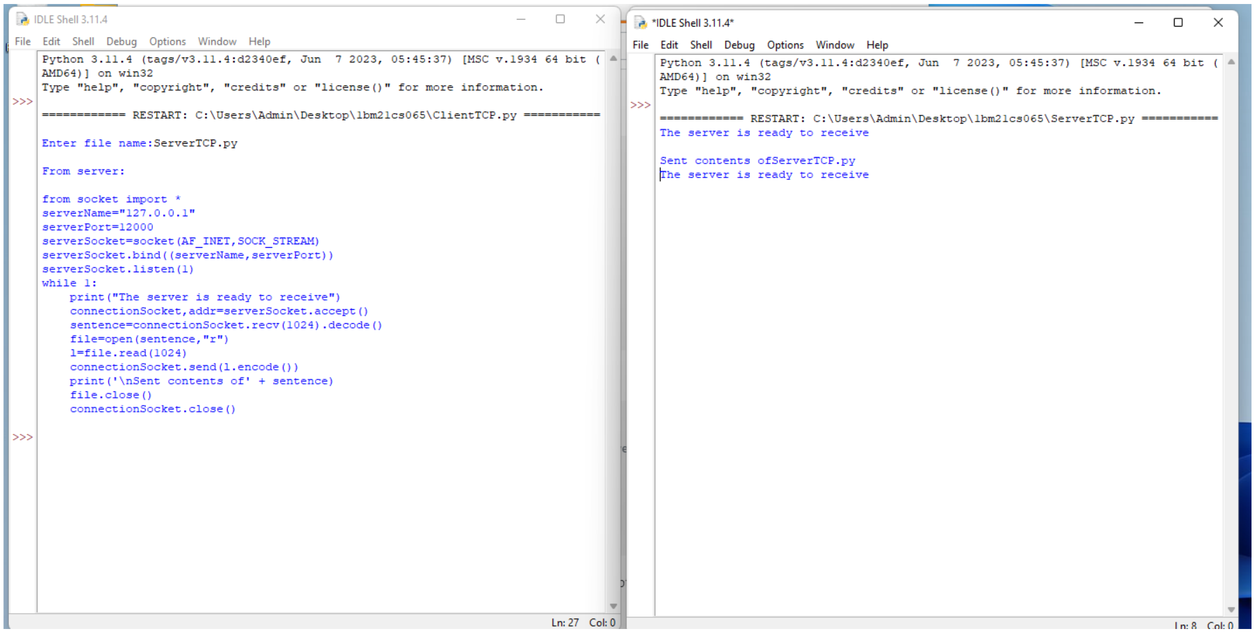
```
from socket import *
serverName = “127.0.0.1”
serverPort = 12000
clientSocket = socket(AF_INET, SOCK_STREAM)
clientSocket.connect((serverName,serverPort))
sentence = input(“\nEnter file name: “)
clientSocket.send(sentence.encode())
filecontents = clientSocket.recv(1024).decode()
print (“\nFrom Server:\n”)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

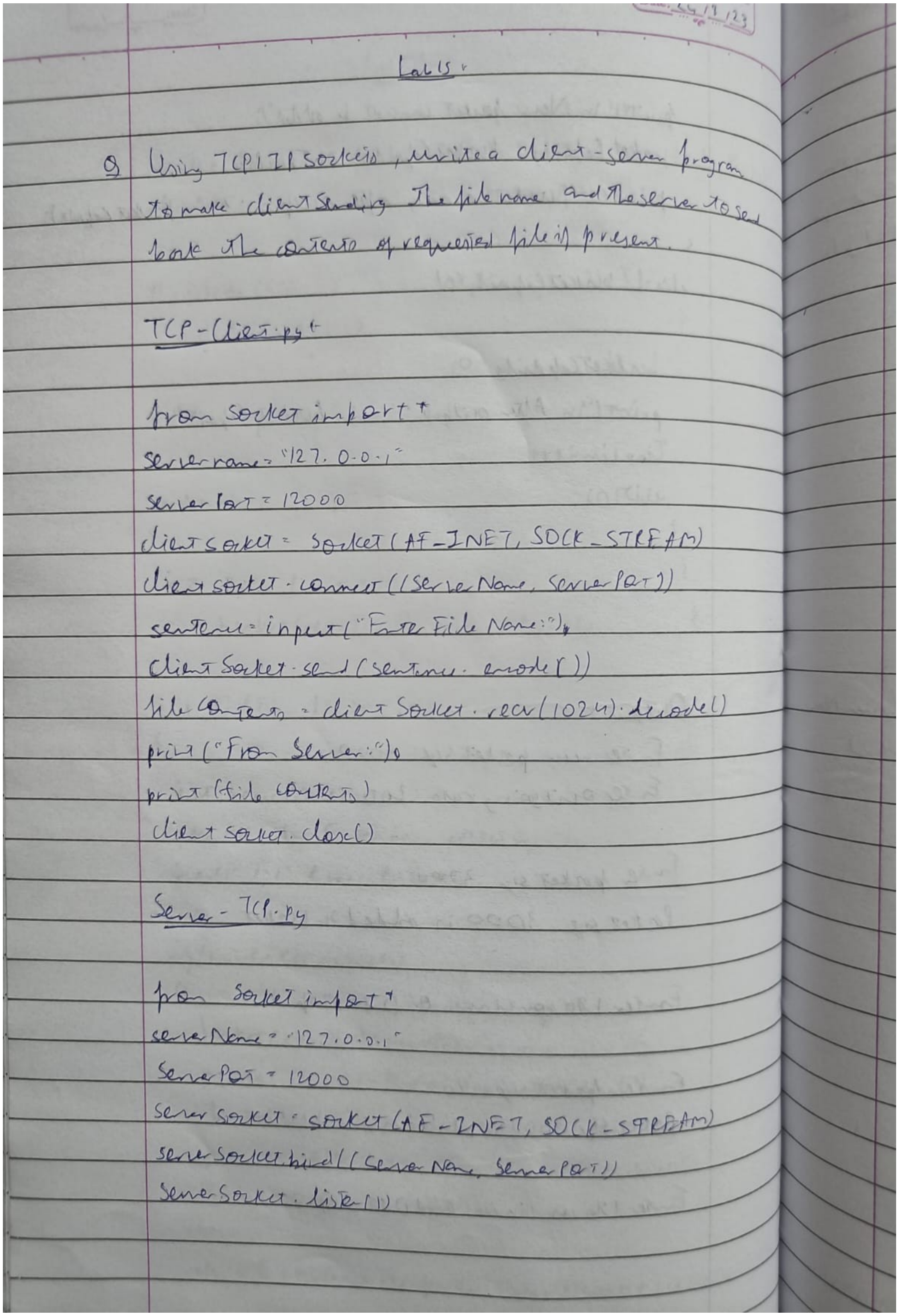
OUTPUT:


IDLE Shell 3.11.4
File Edit Shell Debug Options Window Help
Ln: 27 Col: 0
IDLE Shell 3.11.4
File Edit Shell Debug Options Window Help
Ln: 8 Col: 0

```
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\1bm21cs065\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\1bm21cs065\ServerTCP.py ===========
The server is ready to receive

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

OBSERVATION:



24/7/23

Lab 15:

Q 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 requested file if present.

TCP-Client.py:

```
from socket import*
servername="127.0.0.1"
serverPort=12000
clientsocket= socket(AF_INET, SOCK_STREAM)
clientsocket.connect((ServerName, ServerPort))
sentence=input("Enter File Name:")
clientSocket.send(sentence.encode())
filecontents=clientSocket.recv(1024).decode()
print("From Server:")
print(filecontents)
clientsocket.close()
```

Server-TCP.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 ('Sent '+ sentence)
file.close()
connectionSocket.close()
```

Output:

Client

Server TCl.py

```
From server:
# include <stdio.h>
# include <stdlib.h>

int main()
(

 printf ("Hello");
 return 0;
}
```

Server

Client TCl.py

```
The server is ready to receive
Sent contents of ·\os-lab\\main.c
The server is ready to receive
```