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.

ClientTCP.py

```
from socket import *
serverName = &#39;127.0.0.1&#39;
serverPort = 12000
clientSocket = socket(AF_INET, SOCK_STREAM)
clientSocket.connect((serverName,serverPort))
sentence = input(&quot;\nEnter file name: &quot;)
clientSocket.send(sentence.encode())
filecontents = clientSocket.recv(1024).decode()
print (&#39;\nFrom Server:\n&#39;)
print(filecontents)
clientSocket.close()
```

ServerTCP.py

```
from socket import *
serverName=&quot;127.0.0.1&quot;
serverPort = 12000
serverSocket = socket(AF_INET,SOCK_STREAM)
serverSocket.bind((serverName,serverPort))
serverSocket.listen(1)
while 1:
print (&quot;The server is ready to receive&quot;)
connectionSocket, addr = serverSocket.accept()
sentence = connectionSocket.recv(1024).decode()
```

file=open(sentence,"r")

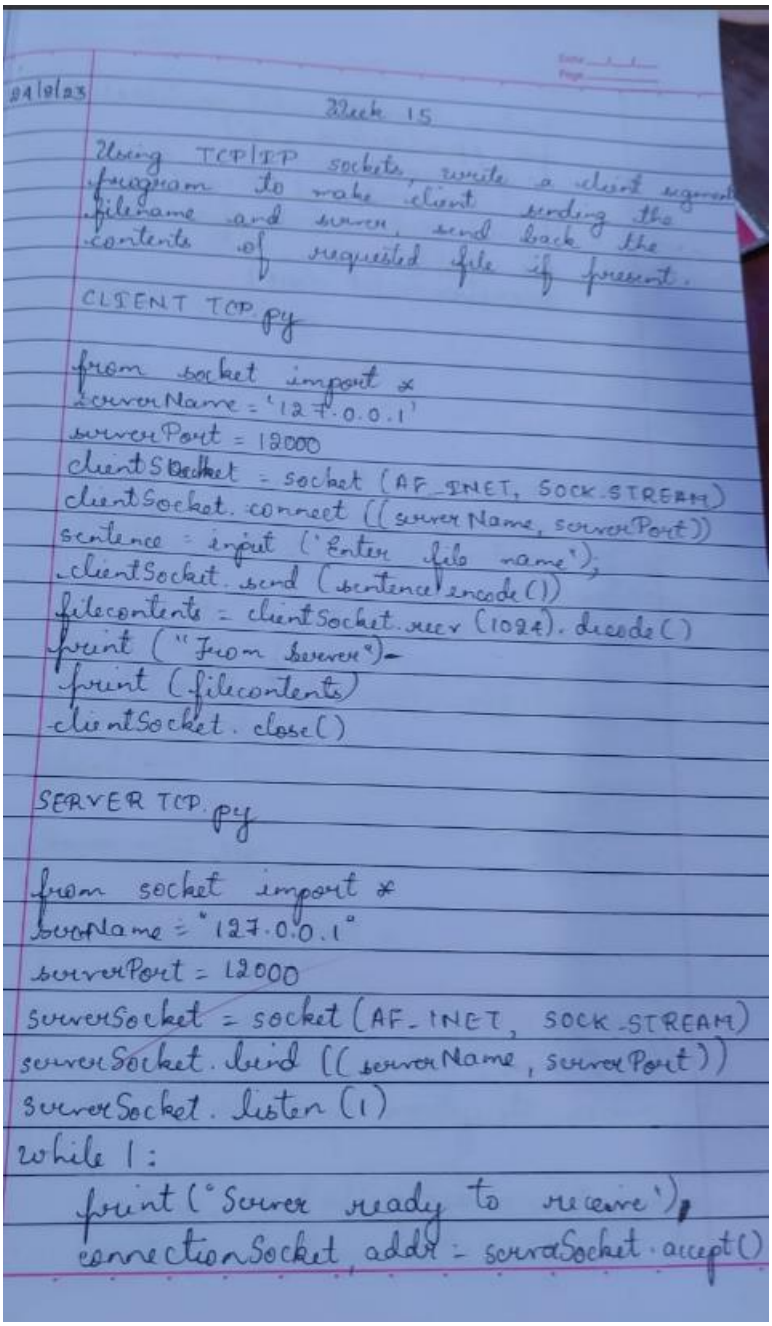
l=file.read(1024)

connectionSocket.send(l.encode())

print ('\nSent contents of ' + sentence)

file.close()

connectionSocket.close()



02/01/23

Week 15

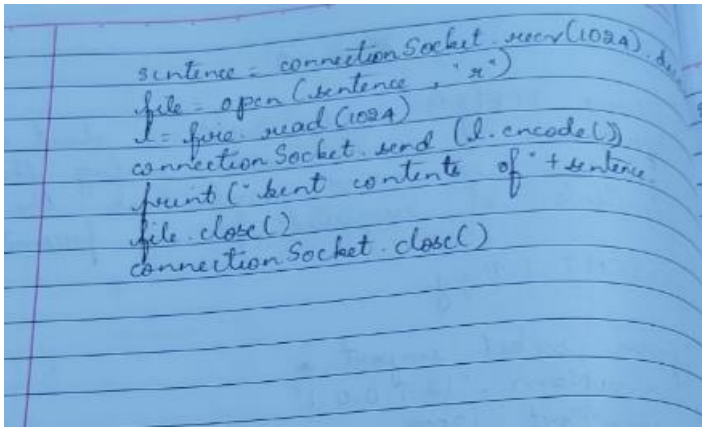
Using TCP/IP sockets, write a client agent program to make client sending the filename and server, send back the contents of requested file if present.

CLIENT TCP.py

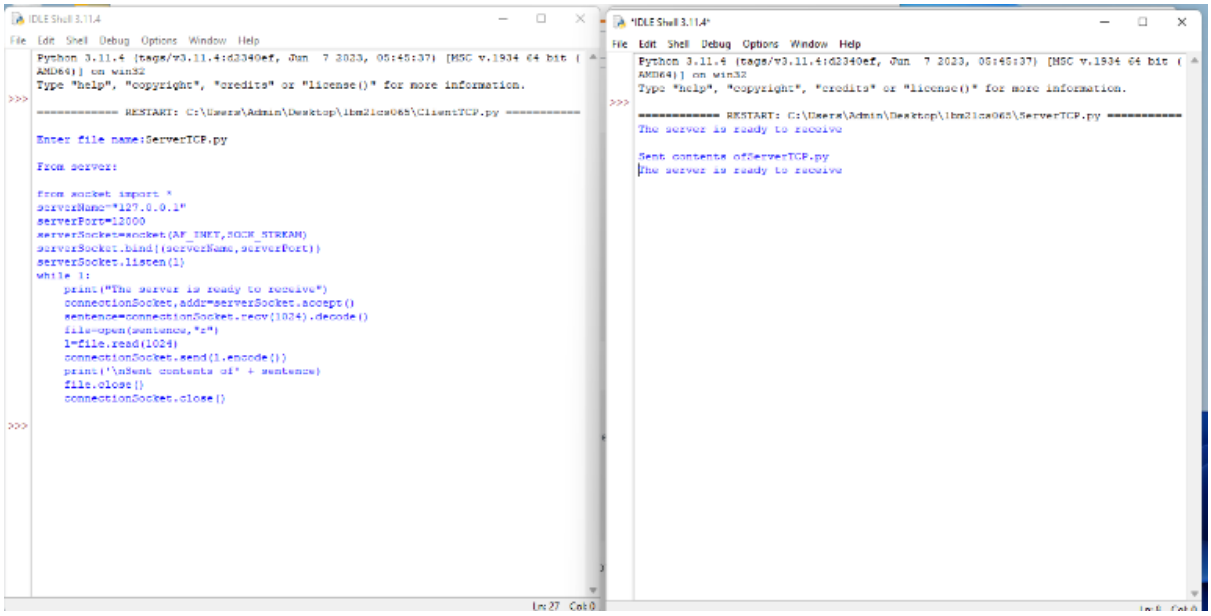
```
from socket import *
serverName = '127.0.0.1'
serverPort = 12000
clientSocket = socket (AF_INET, SOCK_STREAM)
clientSocket.connect ((serverName, serverPort))
sentence = input ('Enter file name');
clientSocket.send (sentence.encode())
filecontents = clientSocket.recv (1024).decode()
print ("From Server")
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 ('Server ready to receive'),
    connectionSocket, addr = serverSocket.accept()
```


sentence = connectionSocket.recv(1024).d
file = open(sentence, "r")
l = file.read(1024)
connectionSocket.send(l.encode())
print("Sent 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\ibm21cs065\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()
>>>
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\ibm21cs065\ServerTCP.py ==========
The server is ready to receive
Sent contents ofServerTCP.py
The server is ready to receive