

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

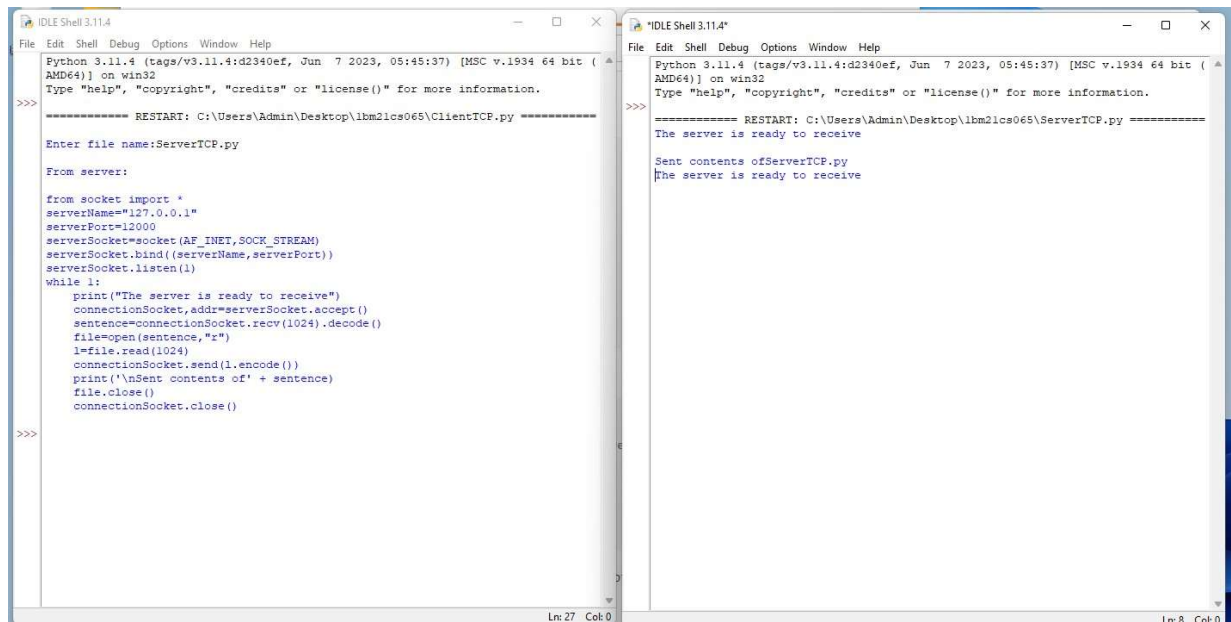
```
from socket import *
serverName = "127.0.0.1"
serverPort = 12000
clientSocket = socket(AF_INET, SOCK_STREAM)
clientSocket.connect((serverName,serverPort))
sentence = input("\nEnter file name: ")
clientSocket.send(sentence.encode())
filecontents = clientSocket.recv(1024).decode()
print ("\nFrom Server:\n")
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\lhm2lcs065\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\lhm2lcs065\ServerTCP.py =====
The server is ready to receive

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

OBSERVATION:

```
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, Server Port))
sentence = input("\nEnter file name: ")
client socket.send(sentence.encode())
file contents = client socket.recv(1024).decode()

print("\n From Server: ")
print(file contents)
client socket.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, address = ServerSocket.accept()
    sentence = ConnectionSocket.recv(1024).decode()

    file = open(sentence, "r")
    d = file.read(1024)
    ConnectionSocket.send(d.encode())
    print("In sent content of " + sentence)
    file.close()
    ConnectionSocket.close()

```

Output

The server is ready to receive
 Enter file name: Server TCP.py
 Contents of Server TCP.py is displayed.