

OBSERVATION

Date ___/___/___
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LAB - 11.

Using TCP IP sockets, write a client server program to make client sending the filename and server to send back the content.

Client TCP.py

```
from socket import *
hostname = '127.0.0.1'
serverPort = 12000
clientSocket = socket(AF_INET, SOCK_STREAM)
clientSocket.connect((hostname, serverPort))
filename = input("Enter filename: ")
clientSocket.send(filename.encode())
filecontents = clientSocket.recv(1024).decode()
print("Data from Server: ")
print(filecontents)
clientSocket.close()
```

Server TCP.py

```
from socket import *
hostname = '127.0.0.1'
serverPort = 12000
serverSocket = socket(AF_INET, SOCK_STREAM)
serverSocket.bind((hostname, serverPort))
serverSocket.listen(1)
while True:
    print("The server is ready to receive")
    connectionSocket, addr = serverSocket.accept()
    filename = connectionSocket.recv(1024).decode()
```


Output

~~After running~~

ServerTCP.py -

The server is ready to receive.
~~Send contents of serverTCP.py~~ the server is ready.

~~ClientTCP.py~~

Enter filename: Server

ServerTCP.py:-

The server is ready to receive.

Send contents of ServerTCP.py

The server is ready to receive

ClientTCP.py:-

Enter filename: ServerTCP.py

~~For server~~: [Contents of ServerTCP.py file]

OUTPUT

ServerTCP.py - C:/Users/sanja/OneDrive/Documents/ServerTCP.py (3.9.13)

File Edit Format Run Options Window Help

```
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 contents of " + sentence)
    file.close()
    connectionSocket.close()
```

ClientTCP.py - C:/Users/sanja/OneDrive/Documents/ClientTCP.py (3.9.13)

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```
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()
```

IDLE Shell 3.9.13

File Edit Shell Debug Options Window Help

```
Python 3.9.13 (tags/v3.9.13:6de2ca5, May 17 2022, 16:36:42) [MSC v.1929 64 b
it (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:/Users/sanja/OneDrive/Documents/ServerTCP.py =====
The server is ready to receive
The server is ready to receive
The server is ready to receive

===== RESTART: C:/Users/sanja/OneDrive/Documents/ServerTCP.py =====
The server is ready to receive

Sent contents of ServerTCP.py
The server is ready to receive
```

IDLE Shell 3.9.13

File Edit Shell Debug Options Window Help

```
the target machine actively refused it
>>>
===== RESTART: C:/Users/sanja/OneDrive/Documents/ClientTCP.py =====
Enter file name:ServerTCP.py

===== RESTART: C:/Users/sanja/OneDrive/Documents/ClientTCP.py =====
Enter file name:ServerTCP.py

===== RESTART: C:/Users/sanja/OneDrive/Documents/ClientTCP.py =====
Enter file name:
===== RESTART: C:/Users/sanja/OneDrive/Documents/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()

>>>
```