

## EXPERIMENT-14

TITLE: 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.

AIM: To demonstrate a TCP/IP sockets by writing a client-server program

Python Code:

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()
```

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()

```

## OUTPUT:

```

ClientTCP.py x ServerTCP.py x
TCP > ServerTCP.py > ...
1 from socket import *
2 serverName="127.0.0.1"
3 serverPort = 12000
4 serverSocket = socket(AF_INET,SOCK_STREAM)
5 serverSocket.bind((serverName,serverPort))
6 serverSocket.listen(1)
7 while 1:
8     print ("The server is ready to receive")
9     connectionSocket, addr = serverSocket.accept()
10    sentence = connectionSocket.recv(1024).decode()

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
PS D:\jyothika\CN> & C:/Users/Jyothika/AppData/Local/Programs/Python/Python311/python.exe d:/jyothika/CN/TCP/ServerTCP.py
The server is ready to receive

PS D:\jyothika\CN> & C:/Users/Jyothika/AppData/Local/Programs/Python/Python311/python.exe d:/jyothika/CN/TCP/ClientTCP.py
Enter file name: d:\jyothika\CN\TCP\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()

```

```
ClientTCP.py x ServerTCP.py
TCP > ClientTCP.py > ...
1  from socket import *
2  serverName = "127.0.0.1"
3  serverPort = 12000
4
5  clientSocket = socket(AF_INET, SOCK_STREAM)
6  clientSocket.connect((serverName,serverPort))
7  sentence = input("\nEnter file name: ")
8  clientSocket.send(sentence.encode())
9  filecontents = clientSocket.recv(1024).decode()
10 print ('\nFrom Server:\n')
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

PS D:\jyothika\CN> & C:/Users/Jyothika/AppData/Local/Programs/Python/Python311/python.exe d:/jyothika/CN/TCP/ServerTCP.py  
The server is ready to receive

Sent contents of d:\jyothika\CN\TCP\ClientTCP.py  
The server is ready to receive