Experiment 15

AIM: 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 = '127.0.0.1'
serverPort = 12000
clientSocket = socket(AF_INET, SOCK_STREAM)
clientSocket.connect((serverName, serverPort))
sentence = input("\n Enter file name")
clientSocket.send(sentence.encode())
file contents = clientSocket.recv(1024).decode()
print("\n From Server")
print(file contents)
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("Server 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 ("\n Sent contents of " + sentence + " to " + addr)

file.close()

connectionSocket.close()

OUTPUT:

Client

Enter file name: anoshor.txt

Reply from Server:

Anoshor IBM21CS024

Server

Sent contents of: anoshor.txt

PROGRAM:

ServerTCP

```
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("\nServer is ready to recieve..")
    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:

```
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())
filecontent = clientSocket.recv(1024).decode()
print("\n from server...")
print(filecontent)
clientSocket.close()
```

OUTPUT :

```
PS C:\Users\anosh\OneDrive\Desktop\CPP in VS\try> python -u "c:\Users\an
osh\OneDrive\Desktop\CPP in VS\try\serverTCP (1).py"

Server is ready to recieve..

Sent contents of anoshor.txt

Server is ready to recieve..
```

```
PS C:\Users\anosh\OneDrive\Desktop\CPP in VS> cd try
PS C:\Users\anosh\OneDrive\Desktop\CPP in VS\try> python -u "c:\Users\a
nosh\OneDrive\Desktop\CPP in VS\try\clientTCP (1).py"

Enter file name: anoshor.txt

 from server...
Hello Everyone! I'm Anoshor
PS C:\Users\anosh\OneDrive\Desktop\CPP in VS\try>
```