Experiment 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.

111	Classmate Page	
1	TCP/IP Sockets	
	ClientTCP.py	
1	I - let = pert st	
	from socket import * Server Name = 127.0.0.1	
	perverPort = 12000	9
M -	clientSocket = socket (AF_INET, SOCK-STREAM)	
	client Socket connect ((scrver Name, server Post))	
	Sentence = input ("Entre file name: ")	(C)
1 3.1.1	client Socket. send (sentence. encode ())	
	file contents = dientSocket.necv(1024).decode()	C2310 194
	print ("In From Server: In")	
	psint (filecontents)	
	clientSocket.close()	
3	the packet of which 15000 is linged to	
	Server TCP. py	
	from socket Emport *	2
1	segves Name = "127.0.0.1"	
-	ServerPort = 12000	
	Server Socket = socket (AF-INET, SOCK-STREAM)	
	Server Socket-bind (server Name, server Port))	
_	Server Socket. listen (1)	
	uhile 1:	
	point ("The server is ready to succeive")	
	connection Socket, adde = server Socket accept()	1000
	sentence = connection Sacket - necv (1024). decode ()	
	Just sucv(1024). dicode()	
	file = open (sentence, "a")	
	l= file. nead (1024)	100
		1

connection Socket. send (1. encode ()) print ("In Sent contents of" + sentence) file close () connection Socket-close(). Output: Server Side ! The server is neady to neceive Client Side: Enter file name: ServerTCR-py From Server: from socket import * (code under serverTet.py is printed as written above) Sorrer Side: The server & is greatly to neceive Sent contents of ServerTCP.py The seaver is neady to neceive.

Screenshots:

```
from socket import *
serverName = '127.0.0.1'
serverPort = 12000
clientSocket = socket(AF_INET,SOCK_STREAM)
clientSocket.connect((serverName,serverPort))

filename = input("Enter the filename: ")
clientSocket.send(filename.encode())
fileContents = clientSocket.recv(1024).decode()
print("\n File contents :\n")
print(fileContents)

clientSocket.close()
```

```
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 is listening")
       connectionSocket, addr = serverSocket.accept()
       filename = connectionSocket.recv(1024).decode()
       file = open(filename, "r")
       fileContents = file.read(1024)
       connectionSocket.send(fileContents.encode())
       print("\nSent file contents of " + filename)
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       file.close()
       connectionSocket.close()
20
```

Output:

```
PS D:\BMSCE\Academics\Semester IV\Computer networks\Lab\TCP> python server.py
Server is listening

Sent file contents of server.py
Server is listening

I
```

```
PS D:\BMSCE\Academics\Semester IV\Computer networks\Lab\TCP> python client.py
Enter the filename: server.py
File contents:
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 is listening")
  connectionSocket, addr = serverSocket.accept()
 filename = connectionSocket.recv(1024).decode()
  file = open(filename, "r")
  fileContents = file.read(1024)
  connectionSocket.send(fileContents.encode())
  print("\nSent file contents of " + filename)
 file.close()
  connectionSocket.close()
PS D:\BMSCE\Academics\Semester IV\Computer networks\Lab\TCP>
```