

### LABORATORY PROGRAM – 15(A)

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: Client.py

```
from socket import * serverName = "127.0.0.1" # Server
address (localhost) serverPort = 12000 # Port number
where the server listens

# Create TCP socket
clientSocket = socket(AF_INET, SOCK_STREAM)
clientSocket.connect((serverName, serverPort)) # Connect to server

# Ask user for file name to request
sentence = input("Enter file name: ")

# Send file name to server
clientSocket.send(sentence.encode())

# Receive file contents from server
filecontents =
clientSocket.recv(1024).decode()
print('From Server:', filecontents)

# Close the connection
clientSocket.close()
```

#### Code: Server.py

```
from socket import *
serverName = "127.0.0.1" # Server address (localhost)
serverPort = 12000 # Port number to listen on

# Create TCP socket
serverSocket = socket(AF_INET, SOCK_STREAM)
serverSocket.bind((serverName, serverPort)) # Bind socket to the address and
port serverSocket.listen(1) # Listen for 1 connection print("The server is ready to
receive")

while True:
    # Accept a connection
    connectionSocket, addr = serverSocket.accept()
```

```

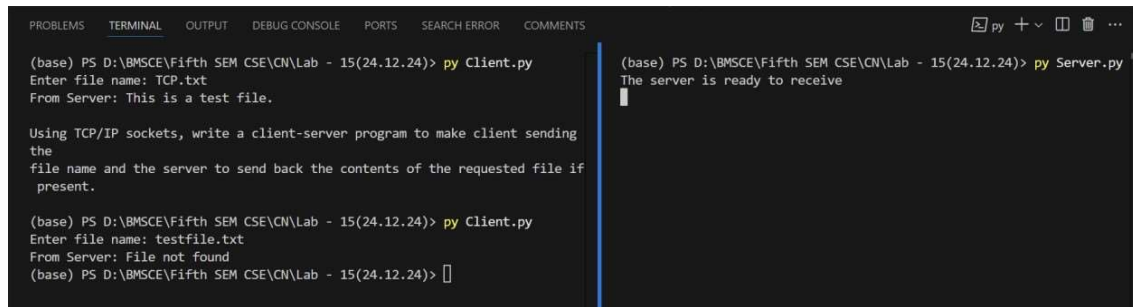
# Receive the file name from the client
sentence = connectionSocket.recv(1024).decode()

# Try opening the file
try:
    file = open(sentence, "r") # Open file in read mode
    fileContents = file.read(1024) # Read file content (up to 1024 bytes)
    connectionSocket.send(fileContents.encode()) # Send file contents to client    file.close()
except FileNotFoundError:
    # Send error message if file not found
    connectionSocket.send("File not found".encode())

# Close the connection
connectionSocket.close()

```

## Output



```

PROBLEMS  TERMINAL  OUTPUT  DEBUG CONSOLE  PORTS  SEARCH ERROR  COMMENTS
(base) PS D:\BMSCE\Fifth SEM CSE\CN\Lab - 15(24.12.24)> py Client.py
Enter file name: TCP.txt
From Server: This is a test file.

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.

(base) PS D:\BMSCE\Fifth SEM CSE\CN\Lab - 15(24.12.24)> py Client.py
Enter file name: testfile.txt
From Server: File not found
(base) PS D:\BMSCE\Fifth SEM CSE\CN\Lab - 15(24.12.24)> 

```

```

(base) PS D:\BMSCE\Fifth SEM CSE\CN\Lab - 15(24.12.24)> py Server.py
The server is ready to receive

```