Program 16

Using UDP 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.

ClientUDP.py

```
from socket import *
serverName = "127.0.0.1"
serverPort = 12000
clientSocket = socket(AF_INET, SOCK_DGRAM)
sentence = input("Enter file name")
clientSocket.sendto(bytes(sentence,"utf-8"),(serverName, serverPort))
filecontents,serverAddress = clientSocket.recvfrom(2048)
print ('From Server:', filecontents)
clientSocket.close()
```

ServerUDP.py

```
from socket import *
serverPort = 12000
serverSocket = socket(AF_INET, SOCK_DGRAM)
serverSocket.bind(("127.0.0.1", serverPort))
print ("The server is ready to receive")
while 1:
    sentence,clientAddress = serverSocket.recvfrom(2048)
    file=open(sentence,"r")
    l=file.read(2048)
    serverSocket.sendto(bytes(l,"utf-8"),clientAddress)
    print("sent back to client",l)
    file.close()
```

Output

```
= RESTART: C:/Users/Dell/Desktop/5th sem/CN/LAB/ClientUDP.py
Enter file name: example.txt
From Server: b'Hello World!!'
```

Figure 87: Output of ClientUDP.py

```
= RESTART: C:/Users/Dell/Desktop/5th sem/CN/LAB/ServerUDP.py
The server is ready to receive
sent back to client Hello World!!
```

Figure 88: Output of ServerUDP.py

Experiment no 16:

Using UDP sockets, write a client-server program to make client sending the filename 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'
serverPort = 12000
clientSocket = socket(AF_INET, SOCK_DGRAM)
sentence = input("Enter file name : ")
clientSocket.sendto(bytes(sentence, "utf-8"), (serverName,
                    serverPort))
fileContents, serverAddress = clientSocket.recvfrom(2048)
print("From Server:", fileContents)
clientSocket.close()
```

- Server.py

```
from socket import *
serverPort = 12000
serverSocket = socket(AF_INET, SOCK_DGRAM)
serverSocket.bind(("127.0.0.1", serverPort))
print("The server is ready to recieve")
while 1:
    sentence, clientAddr = serverSocket.recvfrom(2048)
    file = open(sentence, 'r')
    data = file.read(2048)
    serverSocket.sendto(bytes(data, 'utf-8'), clientAddr)
    print("sent back to client:", data)
file.close()
```

Figure 89: Observation Book

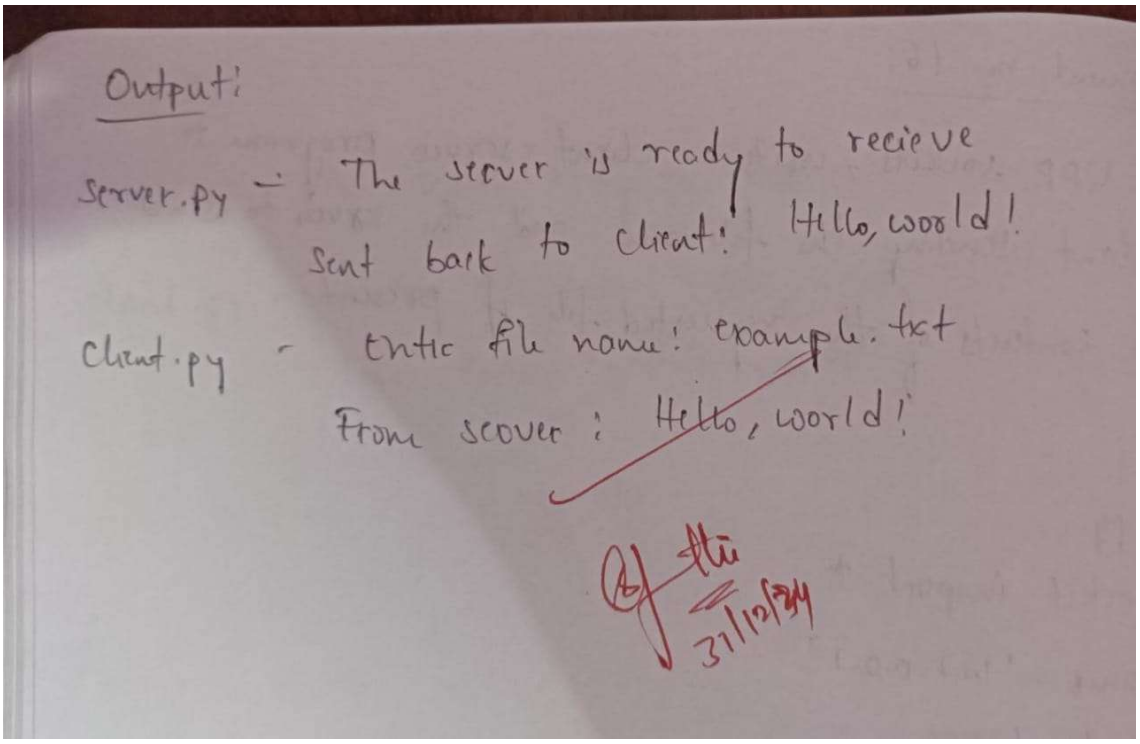

Figure 90: Observation Book