LAB 16:

Aim : 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.

4. 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.

Server UDP.py

```python
from socket import *
serverPort = 12000
serverSocket = socket (AF_INET, SOCK_DGRAM)
ServerSocket.bind (("127.0.0.1", serverport))
print ("The server is ready to recaive")

while 1:
    sentence, client Address = serverSocket.recvfrom
                                              (2048)
    sentence = Sentence.decode ("utf-8")
    file = open (sentence, "r")
    con = file.read (2048)

    serverSocket.sendto (bytes (con, "utf-8"),
                            clientAddress)

    print ('\n Sent contents of ', end = ' ')
    print (sentence)
    file.close ()
```

ClientUDP.py

```python
from socket import *
serverName = "127.0.0.1"
serverPort = 12000
clinetSocket = socket (AF_INET, SOCK_DGRAM)

sentence = input ("\n Enter file name : ")

clinet
client Socket.sendto (bytes (sentence, "utf-8"),
                (serverName, serverPort))

filecontents, serverAddress = client Socket. recvfrom
                            (2048)
print ('\n Reply from Server :\n')
print (filecontents. decode ("utf-8"))

client Socket.close ()
client socket . close ()
```

Output :

Server Instance :-

The server is ready to receive

Client Instance :-

Enter file name : ServerUDP.py

Reply from Server:

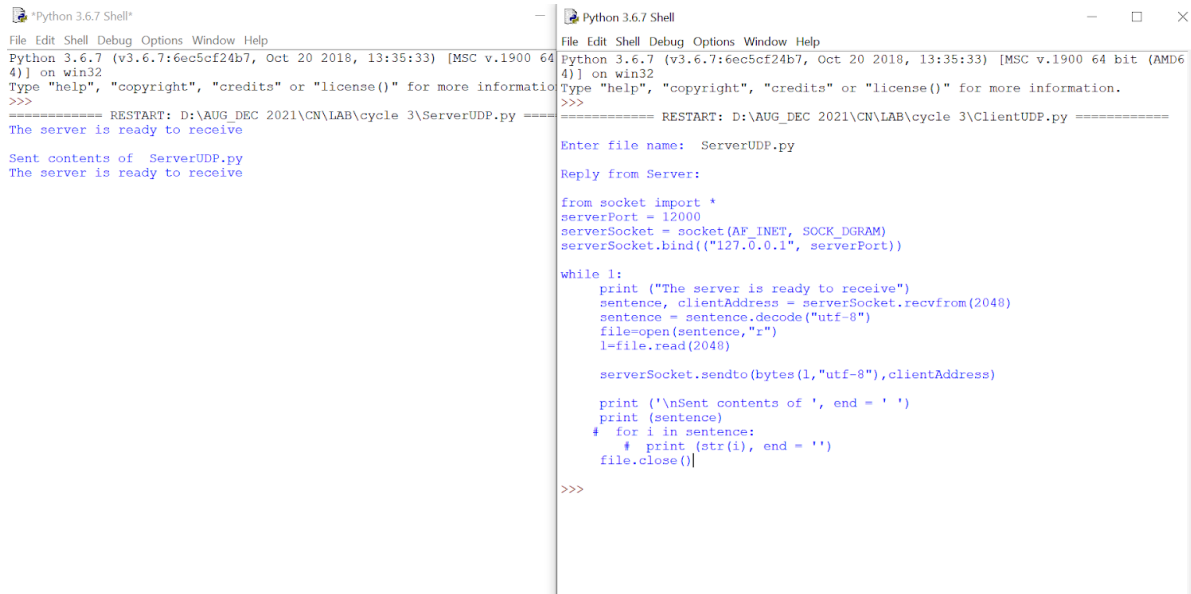contents of ServerUDP.py displayed here.

Server Instance :-

The server is ready to receive

Sent contents of ServerUDP.py
The server is ready to receive.

29/8/2023

Output :

Server instance and Client instance respectively:

Left window — *Python 3.6.7 Shell*

```
File   Edit  Shell  Debug  Options  Window  Help
Python 3.6.7 (v3.6.7:6ec5cf24b7, Oct 20 2018, 13:35:33) [MSC v.1900 64
4)] on win32
Type "help", "copyright", "credits" or "license()" for more informatio
>>>
============= RESTART: D:\AUG_DEC 2021\CN\LAB\cycle 3\ServerUDP.py ====
The server is ready to receive

Sent contents of  ServerUDP.py
The server is ready to receive
```

Right window — *Python 3.6.7 Shell*

```
File   Edit  Shell  Debug  Options  Window  Help
Python 3.6.7 (v3.6.7:6ec5cf24b7, Oct 20 2018, 13:35:33) [MSC v.1900 64 bit (AMD6
4)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
============= RESTART: D:\AUG_DEC 2021\CN\LAB\cycle 3\ClientUDP.py ============

Enter file name:  ServerUDP.py

Reply from Server:

from socket import *
serverPort = 12000
serverSocket = socket(AF_INET, SOCK_DGRAM)
serverSocket.bind(("127.0.0.1", serverPort))

while 1:
    print ("The server is ready to receive")
    sentence, clientAddress = serverSocket.recvfrom(2048)
    sentence = sentence.decode("utf-8")
    file=open(sentence,"r")
    l=file.read(2048)

    serverSocket.sendto(bytes(l,"utf-8"),clientAddress)

    print ('\nSent contents of ', end = ' ')
    print (sentence)
    #  for i in sentence:
        #  print (str(i), end = '')
    file.close()

>>>
```