

Cycle II

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.

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)
    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

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

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

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

filecontents, serverAddress = clientSocket.recvfrom(
    2048)

print("\n Reply from Server:\n")
print(filecontents.decode("utf-8"))

clientSocket.close()
clientSocket.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!

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Output :

Server instance :

```
*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)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== 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
```

Client instance :

```
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 (AMD64)] 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()

>>>
```

