

LAB 16

Using UDP sockets, write a client-server program to make the client send the file name and the server to send back the contents of the requested file if present.

CODE:

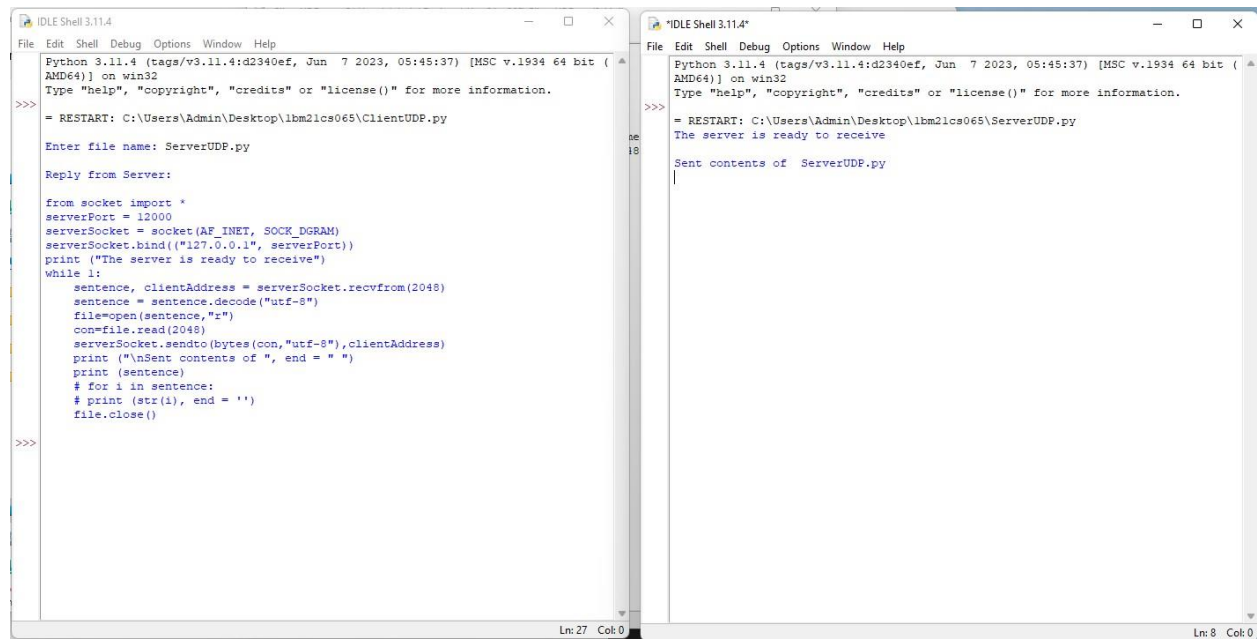
ClientUDP.py

```
from socket import *
serverName = "127.0.0.1"
serverPort = 12000
clientSocket = socket(AF_INET, SOCK_DGRAM)
sentence = input("\nEnter file name: ")
clientSocket.sendto(bytes(sentence,"utf-8"),(serverName, serverPort))
filecontents,serverAddress = clientSocket.recvfrom(2048)
print ("\nReply from Server:\n")
print (filecontents.decode("utf-8"))
# for i in filecontents:
# print(str(i), end = " ")
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)
    sentence = sentence.decode("utf-8")
    file=open(sentence,"r")
    con=file.read(2048)
    serverSocket.sendto(bytes(con,"utf-8"),clientAddress)
    print ("\nSent contents of ", end = " ")
    print (sentence)
    # for i in sentence:
    # print (str(i), end = " ")
    file.close()
```

OUTPUT:



```
Python 3.11.4 (tags/v3.11.4:d2340ef, Jun 7 2023, 05:45:37) [MSC v.1934 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> = RESTART: C:\Users\Admin\Desktop\lhm2lcs065\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))
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 ("\nSent contents of ", end = " ")
    print (sentence)
    # for i in sentence:
    # print (str(i), end = '')
    file.close()

>>>
```

```
Python 3.11.4 (tags/v3.11.4:d2340ef, Jun 7 2023, 05:45:37) [MSC v.1934 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> = RESTART: C:\Users\Admin\Desktop\lhm2lcs065\ServerUDP.py

The server is ready to receive

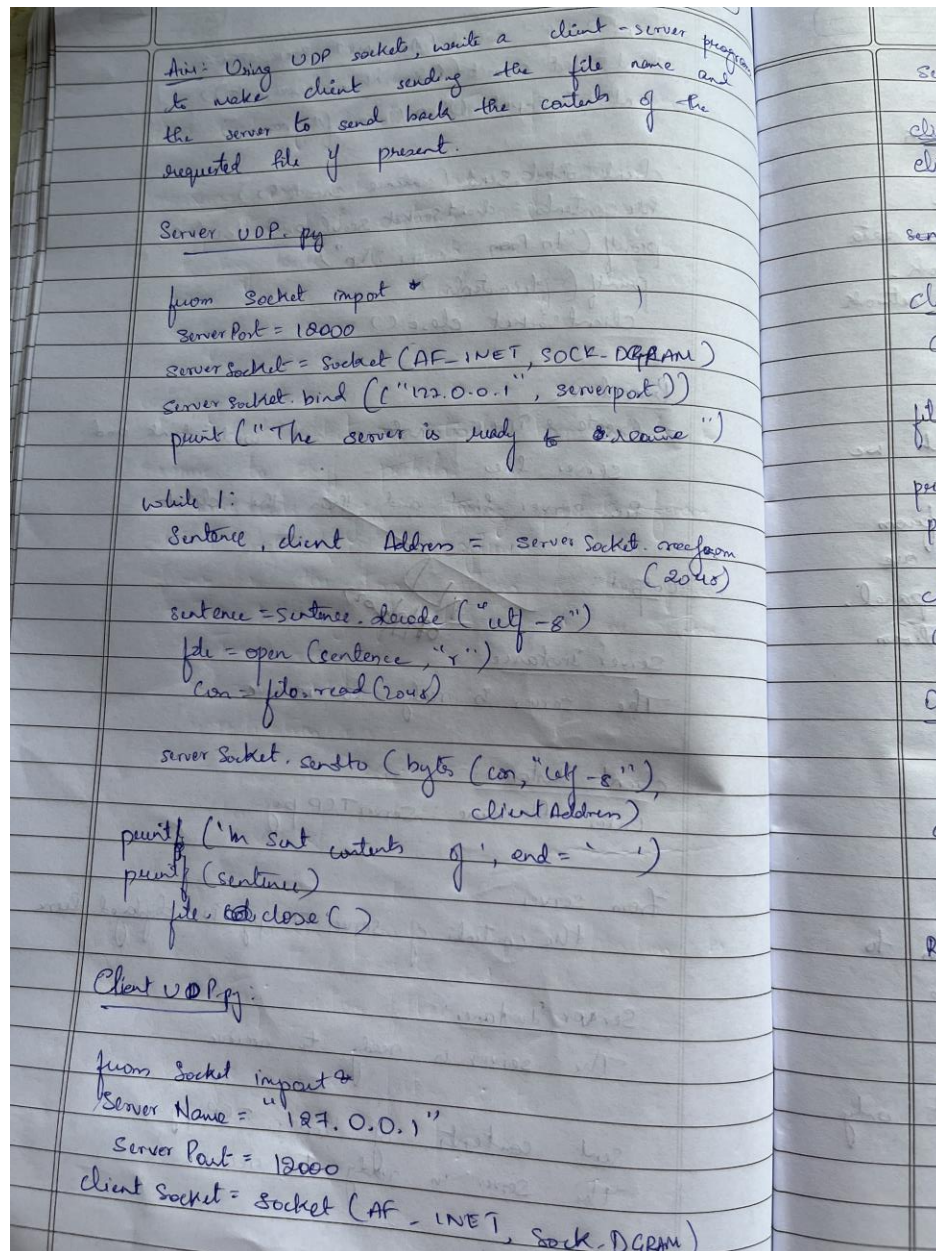
Sent contents of  ServerUDP.py
|

>>>
```

Ln: 27 Col: 0

Ln: 8 Col: 0

OBSERVATION:



program
and

sentence = input("In Enter file name = ")

client:

client socket = socket(AF_INET, SOCK_DGRAM)

sentence = input("In Enter file name = ")

client:

client socket.sendto(bytes(sentence, 'utf-8'),
(serverName, serverPort))

file contents, serverAddress = client socket.recvfrom
(1024)

print("In Reply from server: In")

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: server UDP.py

Reply from server:

contents of server UDP.py displayed here.

Server Instance:

The server is ready to receive.

Sent contents of server UDP.py

The server is ready to receive.

ADP
01/01/2022