

WEEK 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()
clientSocket.close()
```

ServerUDP.py

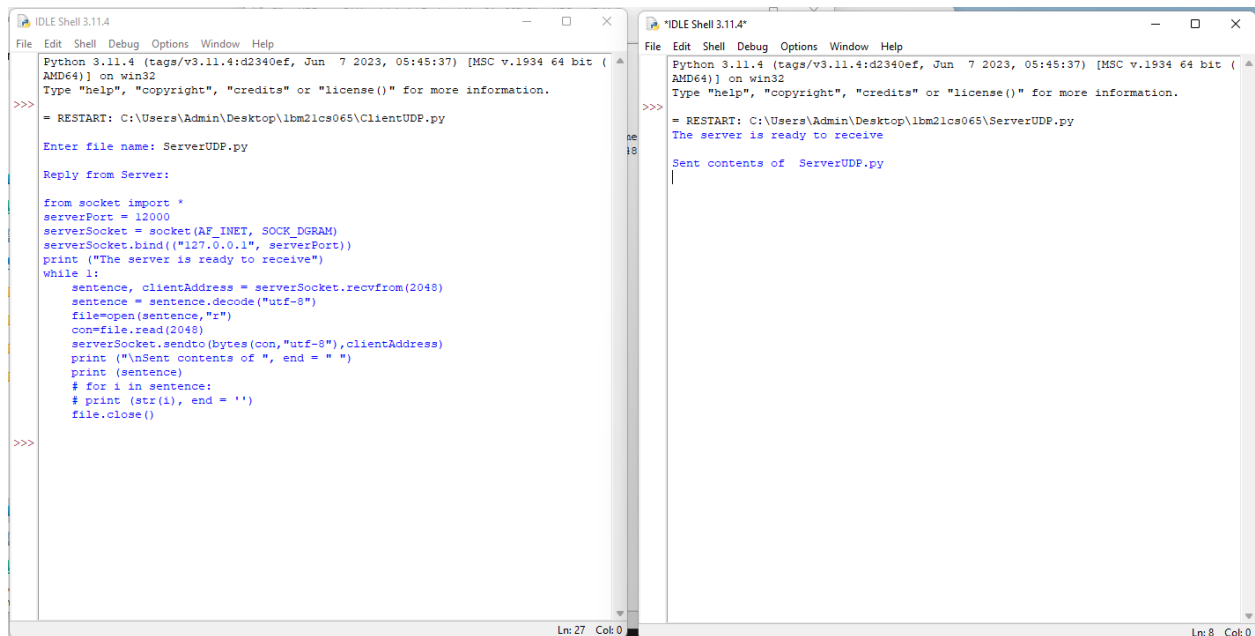
```
from socket import *
serverPort = 12000
serverSocket = socket(AF_INET, SOCK_DGRAM)
serverSocket.bind(("127.0.0.1", serverPort))
print ("The server is ready to receive")
while 1:
sentence, clientAddress = serverSocket.recvfrom(2048)
sentence = sentence.decode("utf-8")
```

```

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:



The image shows two side-by-side windows of the IDLE Shell 3.11.4 environment. The left window displays the source code of a Python script named ClientUDP.py. The script imports the socket module, sets a server port to 12000, and binds a server socket to the IP address 127.0.0.1. It then enters a loop where it receives data from a client, decodes it from bytes to a string, opens a file named 'ServerUDP.py' in read mode, reads its contents, and sends those contents back to the client via the server socket. The right window shows the output of the script. It displays the message 'The server is ready to receive' and then 'Sent contents of ServerUDP.py'.

```

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
|

OBSERVATION:

classmate

Date _____

Page _____

24/8/23

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.

CODE -

```
Client UDP.py
from socket import *
serverName = "127.0.0.1"
serverPort = 12000
clientSocket = socket(AF_INET, SOCK_DGRAM)
sentance = input("Enter file name: ")
clientSocket.sendto(bytes(sentance, "utf-8"), (serverName,
serverPort))
fileContents, serverAddress = clientSocket.recvfrom(2048)
print("Reply from server: ")
print(fileContents.decode("utf-8"))
# for i in fileContents:
#     print(str(i), end=" ")
clientSocket.close()
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:
```

```
sentenc, clientAddress = serverSocket.recvfrom(2048)
```

```
sentenc = sentenc.decode("utf-8")
```

```
file = open(sentenc, "r")
```

```
con = file.read(2048)
```

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

```
print('In sent contents of', end = '')
```

```
print(sentenc)
```

```
# for i in sentenc:
```

```
    # print(str(i), end = "")
```

```
file.close()
```