

## 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

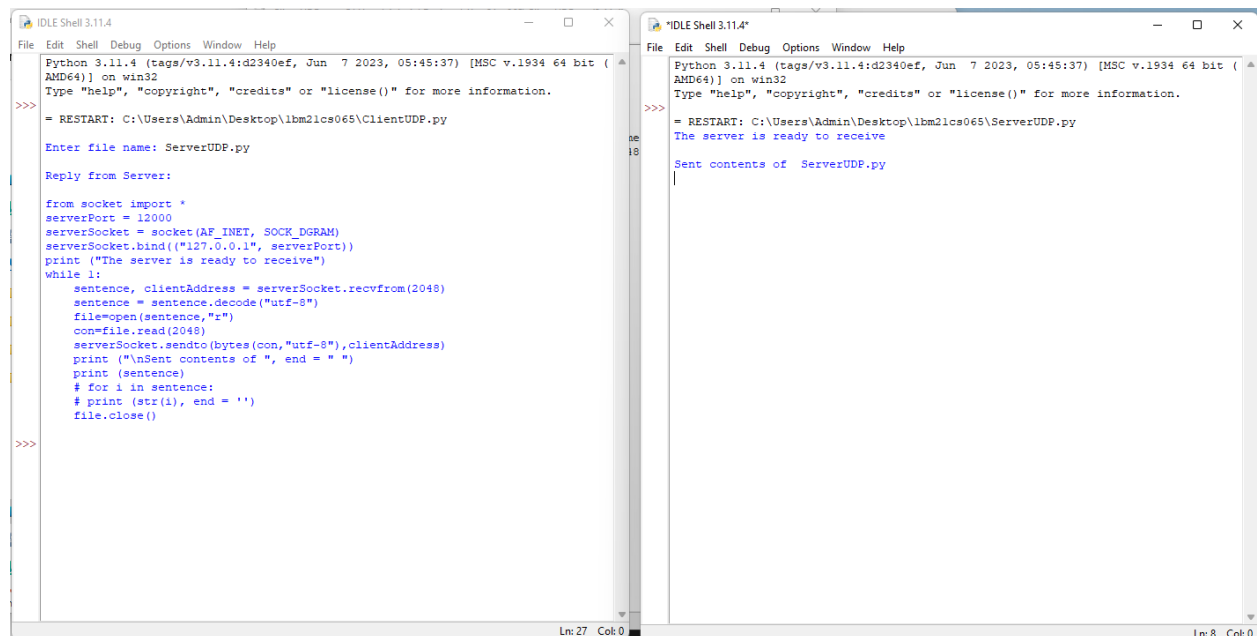
```
from socket import *
serverPort = 12000
serverSocket = socket(AF_INET, SOCK_DGRAM)
serverSocket.bind(("127.0.0.1", serverPort))
print ("The server is ready to receive")
while 1:
sentence, clientAddress = serverSocket.recvfrom(2048)
sentence = sentence.decode("utf-8")
```

```

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 screenshots of the IDLE Shell 3.11.4 window. The left window displays the Python code for a server that receives data from a client and prints it. The right window shows the output of the script, which includes the restart command, the file name, and the contents of the file.

```

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:

### Exp 16.1

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.py

```
from socket import *
server_name = "127.0.0.1"
server_port = 12000
client_socket = socket((Name, port))
sentence = input("Enter file name:")
client_socket.sendto(bytes(sentence, "utf-8"), (server_name, port))

file_contents_server = client_socket.recvfrom(2048)
print("Reply from server")
print(file_contents_server[0].decode("utf-8"))
client_socket.close()
```

Server UDP.py

```
from socket import *
server_name = "127.0.0.1"
server_port = 12000
server_socket = socket((server_name, server_port))
server_socket.bind((server_name, server_port))
print("Server is ready to receive")
while(1):
    sender, client_addr = server_socket.recvfrom(2048)
    server_data = sender.decode("utf-8")
    file = open(server_data, "r")
```

con = file.read(1024)

Server sock.sendto(bytes(con, "utf-8"), Client Address)

print("In Sent contents of", end="")

print(con)

file.close()

Output

Server UDP.py

The server is ready to receive

Sent contents of server UDP.py

Server is ready to receive

Client UDP.py

Enter file name: Server UDP.py

Reply from server

~ contents of server UDP.py