

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 code for a Python script named ClientUDP.py. The code imports the socket module, sets a server port of 12000, binds the server socket to the IP address 127.0.0.1, and enters a loop to receive data from a client. The received data is decoded from UTF-8, read from a file named ServerUDP.py, and then sent back to the client. The code also prints the received sentence and its individual characters. The right window shows the output of the script, which includes the message 'The server is ready to receive' and '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:

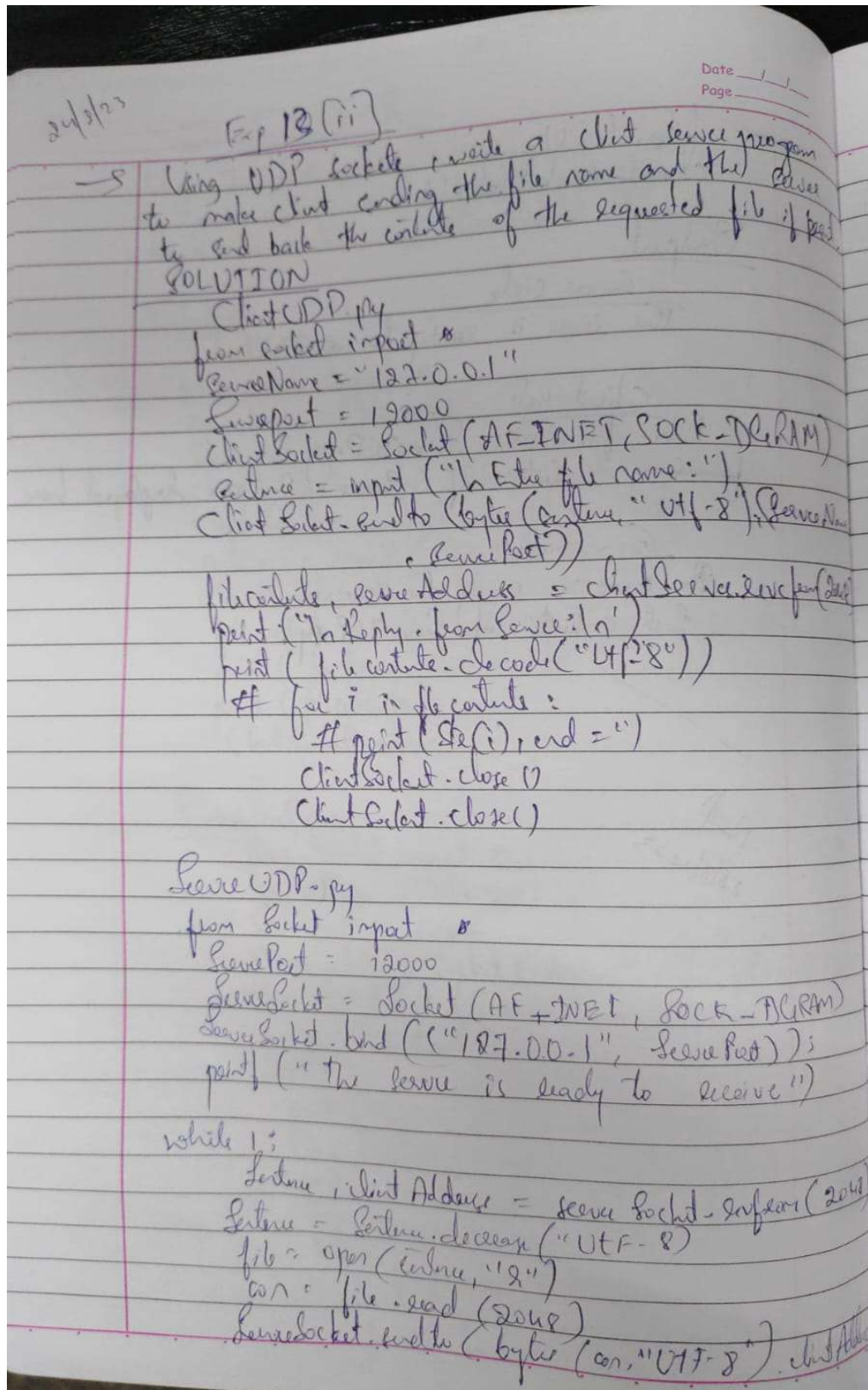
from socket import *
serverPort = 12000
serverSocket = socket(AF_INET, SOCK_DGRAM)
serverSocket.bind(("127.0.0.1", serverPort))
print ("The server is ready to receive")
while 1:
    sentence, clientAddress = serverSocket.recvfrom(2048)
    sentence = sentence.decode("utf-8")
    file=open(sentence,"r")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



```
print ("In Sent Contents of: ", end="")  
print (sentence)  
# for i in sentence  
#     print (str(i), end=" ")  
file.close()
```

Output

Client Side

Enter file name :- Server UDP.py

The Contents of the file is displayed here:

→ Server side

- The server is ready to receive
- Sent contents of Server UDP.py

AD
28/8/2023