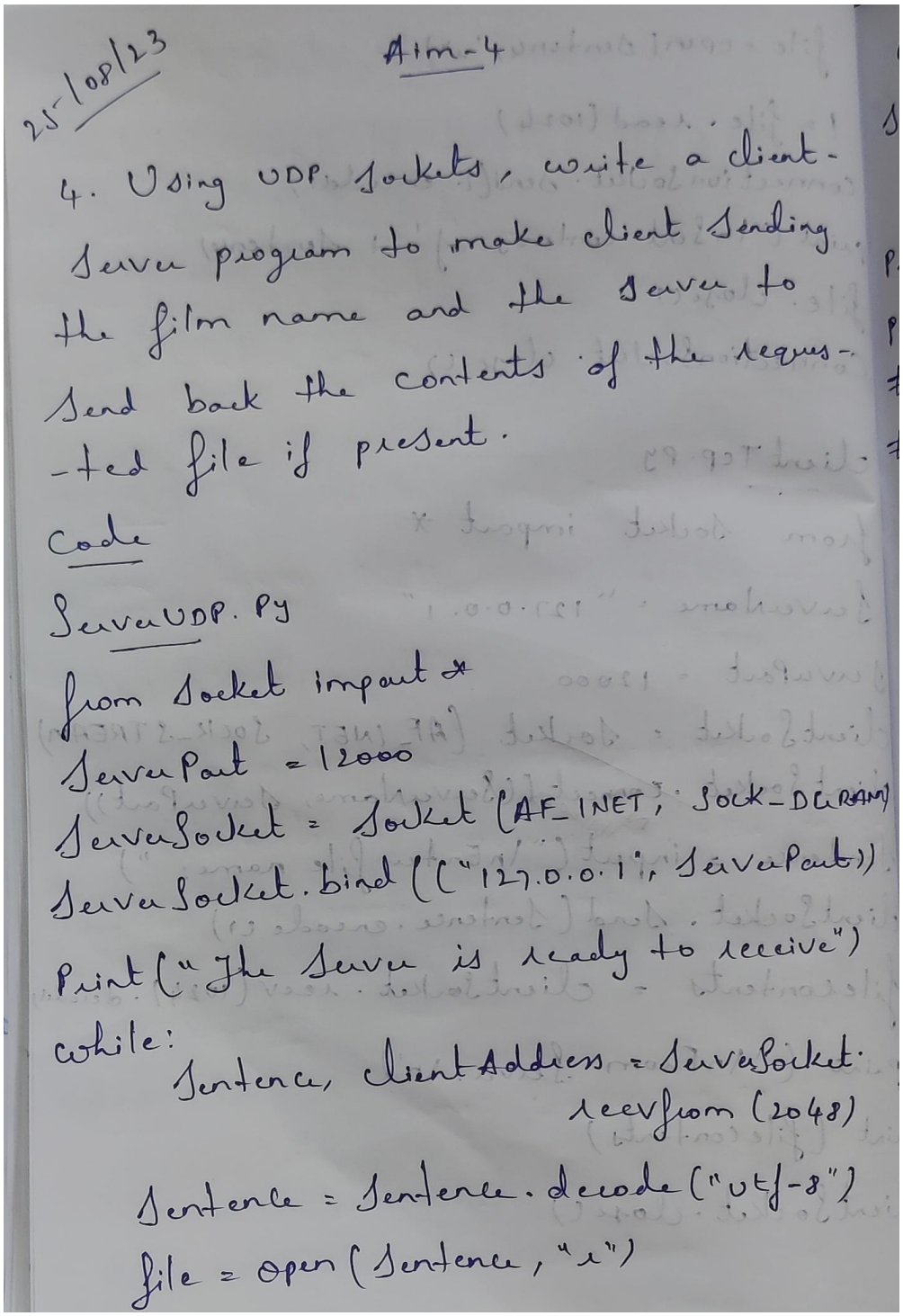
Aim-16

16. 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:



25-10-23

Aim-4

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.

Code

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:
    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)
# for i in sentence:
# print (str(i), end = ' ')
file.close()
```

clientUDP.py

```
from sys import
from socket import *
serverName = "127.0.0.1"
serverPort = 12000
clientSocket = socket(AF_INET, SOCK_DGRAM)
sentence = input("\n Enter file name: ")
clientSocket.sendto(bytes(sentence, "utf-8"),
                    (serverName, serverPort))
fileContents, serverAddress = clientSocket.recv
                              from(2048)
```

11/9/2023

```
print ('\n Reply from Server: \n')
Print (filecontents.decode("utf-8"))
# for i in filecontents:
#Print (str(i), end = '')
clientSocket.close()
```

Output

from Server Shell

Enter file name.

The server is ready to receive

Sent contents of ServerUdp.py (after sending entering the file name by client).

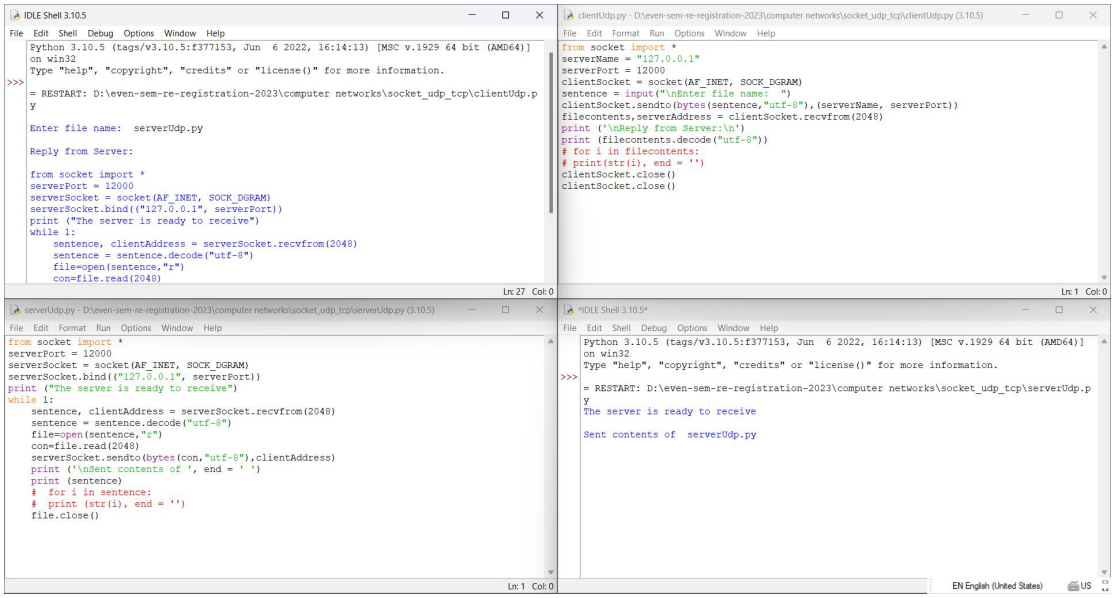
from client shell

Enter the file name: ServerUdp.py

'Reply from Server:

(the contents of ServerUdp.py will be displayed/shown as per request).

Output:


IDLE Shell 3.10.5
File Edit Shell Debug Options Window Help
Python 3.10.5 (tags/v3.10.5:f377153, Jun 6 2022, 16:14:13) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: D:\even-sem-re-registration-2023\computer networks\socket_udp_tcp\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)
Ln: 27 Col: 0
clientUdp.py - D:\even-sem-re-registration-2023\computer networks\socket_udp_tcp\clientUdp.py (3.10.5)
File Edit Format Run Options Window Help
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()
Ln: 1 Col: 0
serverUdp.py - D:\even-sem-re-registration-2023\computer networks\socket_udp_tcp\serverUdp.py (3.10.5)
File Edit Format Run Options Window Help
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()
Ln: 1 Col: 0
IDLE Shell 3.10.5
File Edit Shell Debug Options Window Help
Python 3.10.5 (tags/v3.10.5:f377153, Jun 6 2022, 16:14:13) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: D:\even-sem-re-registration-2023\computer networks\socket_udp_tcp\serverUdp.py
The server is ready to receive
Sent contents of serverUdp.py
EN English (United States)
US