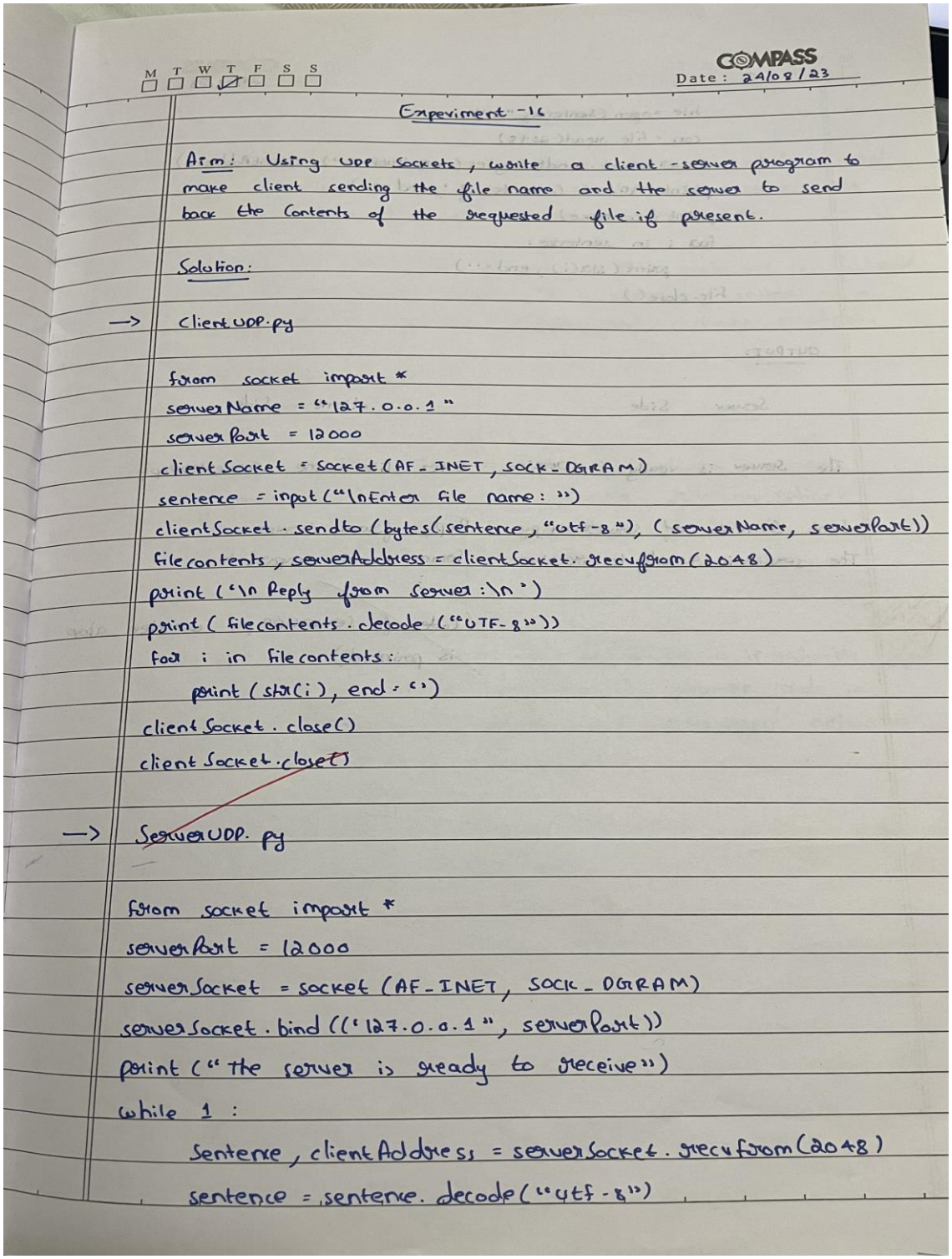
LAB PROGRAM – 16

Q) 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.

Procedure :



M T W T F S S

COMPASS
Date : 24/08/23

Experiment -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.

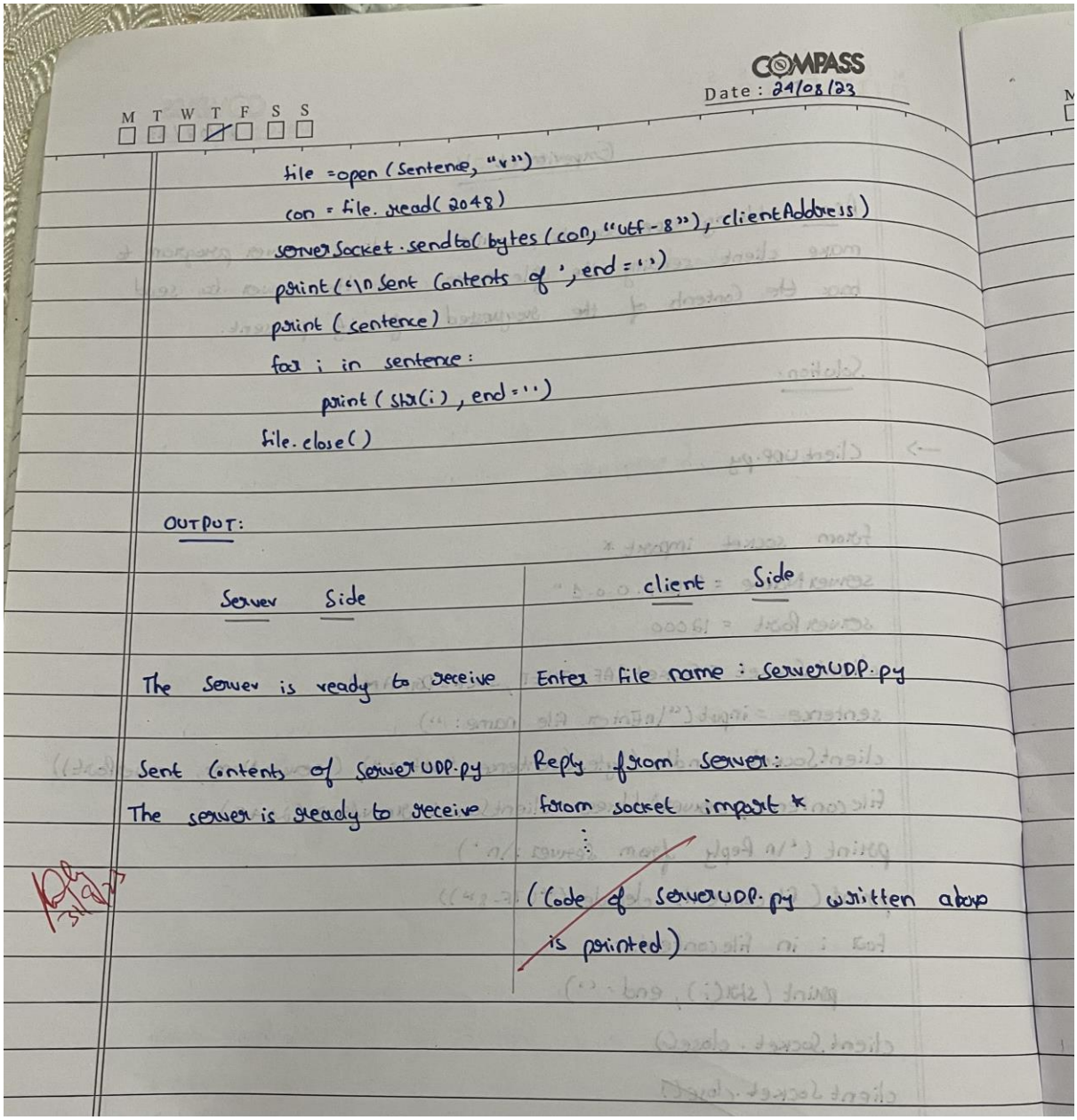
Solution:

-> 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('\n Reply 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('\n Sent Contents of ', end = ' ')
print (sentence)
for i in sentence:
    print (str(i), end = '')
file.close()
```

OUTPUT:

Server Side	client Side
The Server is ready to receive	Enter file name : serverUDP.py
Sent Contents of serverUDP.py	Reply from Server:
The server is ready to receive	from socket import *
	⋮
	(Code of serverUDP.py written above is printed)

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 read to recieve")
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("\n Sent contents of " , end= "")
    print(sentence)
    for i in sentence :
        print(str(i),end="")
    file.close()
```

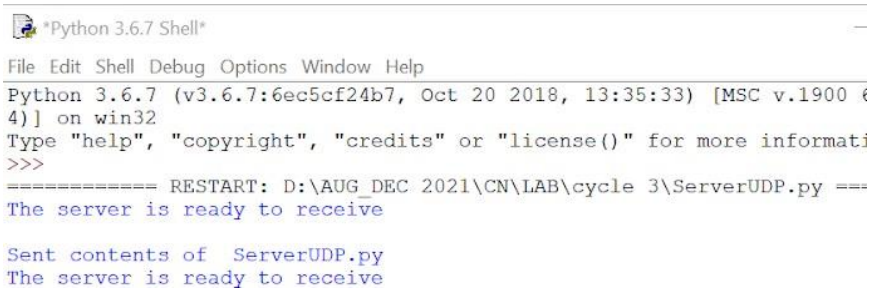
ClientUDP.py

```
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 servere:\n")
```

```
print(filecontents.decode("utf-8"))
for i in filecontents:
    print(str(i),end="")
clientSocket.close()
clientSocket.close()
```

Output :

Server Instance :



Client Instance :