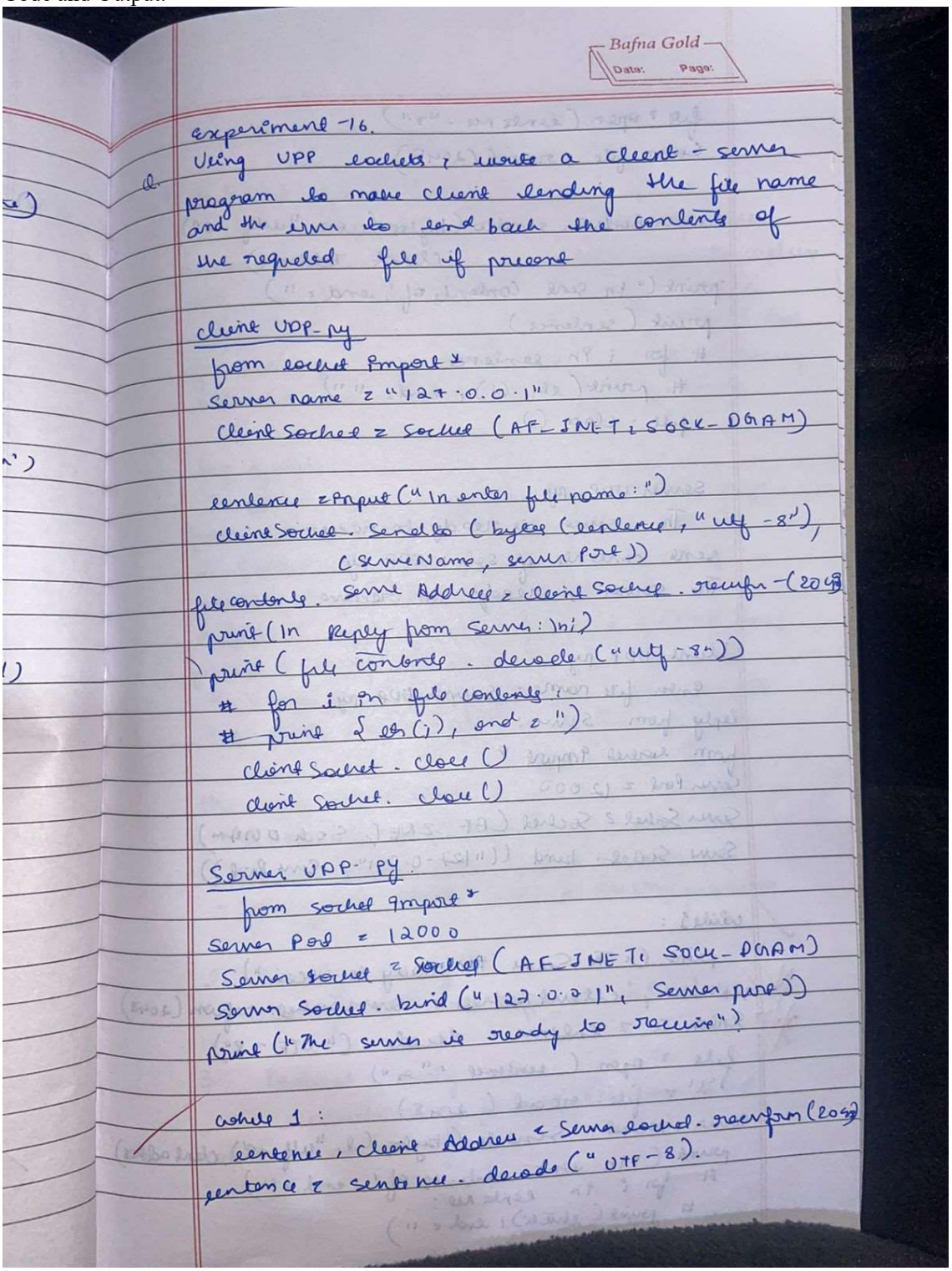
Avani.A (1BM22CS059)

EXPERIMENT-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 and Output:



Experiment -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

client UDP.py

```
from socket import *
serverName = "127.0.0.1"
clientSocket = socket(AF_INET, SOCK_DGRAM)

sentence = input("\n enter 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()
```

Server UDP.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)

Server Socket. sendto (bytes (con, "utf-8"),
client Address)
print ("In sent contents of ', end = '')
print (sentence)
for i in sentence:
print (str (i), end = "")
file.close ()

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

Client UDP.py
Enter file name: Server UDP.py
Reply from Server:
from socket import *
ServerPort = 12000
ServerSocket = Socket (AF_INET, SOCK_DGRAM)
ServerSocket.bind (("127.0.0.1", ServerPort))

while 1:
print ("The Server is ready to receive")
sentence, clientAddress = ServerSocket.recvfrom (2048)
sentence = sentence.decode ("UTF-8")
file = open (sentence, "r")
'l' = file.read (2048)
Server.socket.sendto (bytes (l, "utf-8"), clientAddress)
print ("In sent contents of ', end = '')
for i in sentence:
print (str(i), end = "")
file.close ()

Code:

clientUPD.py

```
from socket import *

serverIP = '127.0.0.1'
serverPort = 12000
clientSocket = socket(AF_INET,SOCK_DGRAM)
sentence = input("File name")
clientSocket.sendto(bytes(sentence,'utf-8'),(serverIP,serverPort))
contents,serverAddress = clientSocket.recvfrom(2048)
print(contents.decode())
clientSocket.close()
```

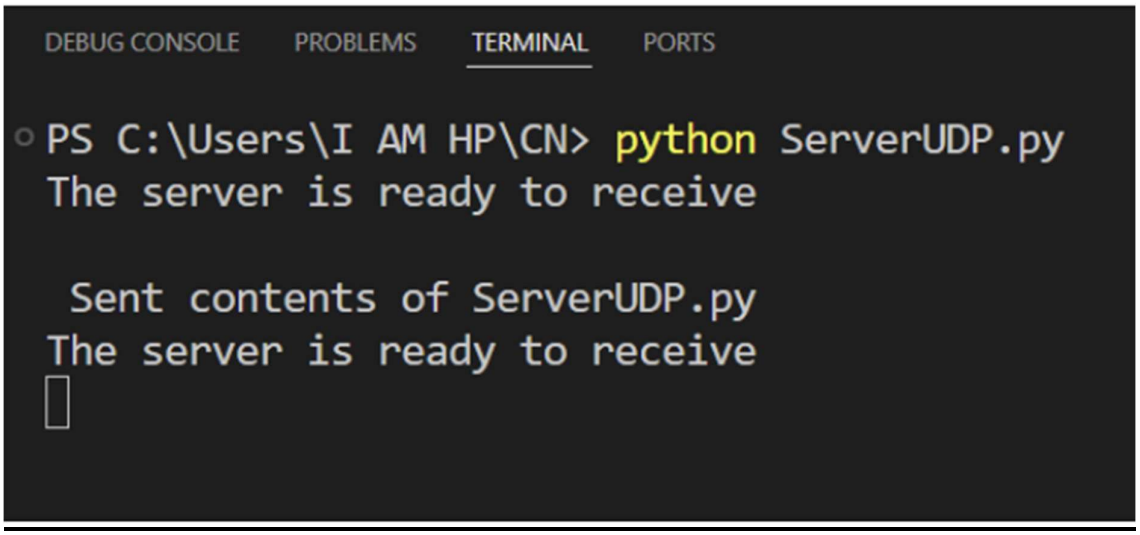
serverUDP.py

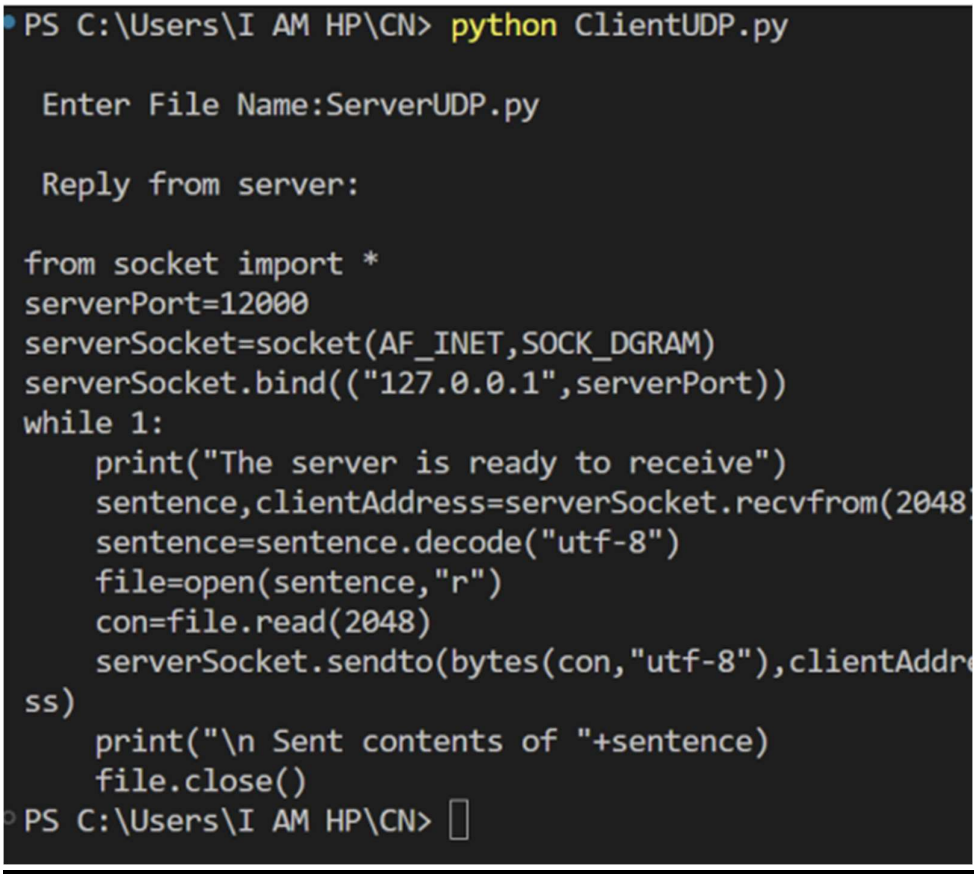
```
from socket import *

serverIP = '127.0.0.1'
serverPort = 12000
serverSocket = socket(AF_INET,SOCK_DGRAM)
serverSocket.bind((serverIP,serverPort))

while(1):
    print("READY")
    sentence,clientAdd =  serverSocket.recvfrom(2048)
    sentence = sentence.decode()
    file = open(sentence,'r')
    cont = file.read(2048)
    serverSocket.sendto(bytes(cont,'utf-8'),clientAdd)
    file.close()
    serverSocket.close()
```

Output:


DEBUG CONSOLE
PROBLEMS
TERMINAL
PORTS
PS C:\Users\I AM HP\CN> python ServerUDP.py
The server is ready to receive
Sent contents of ServerUDP.py
The server is ready to receive


PS C:\Users\I AM HP\CN> python 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))
while 1:
print("The server is ready to receive")
sentence,clientAddress=serverSocket.recvfrom(2048
sentence=sentence.decode("utf-8")
file=open(sentence,"r")
con=file.read(2048)
serverSocket.sendto(bytes(con,"utf-8"),clientAddr
ss)
print("\n Sent contents of "+sentence)
file.close()
PS C:\Users\I AM HP\CN>