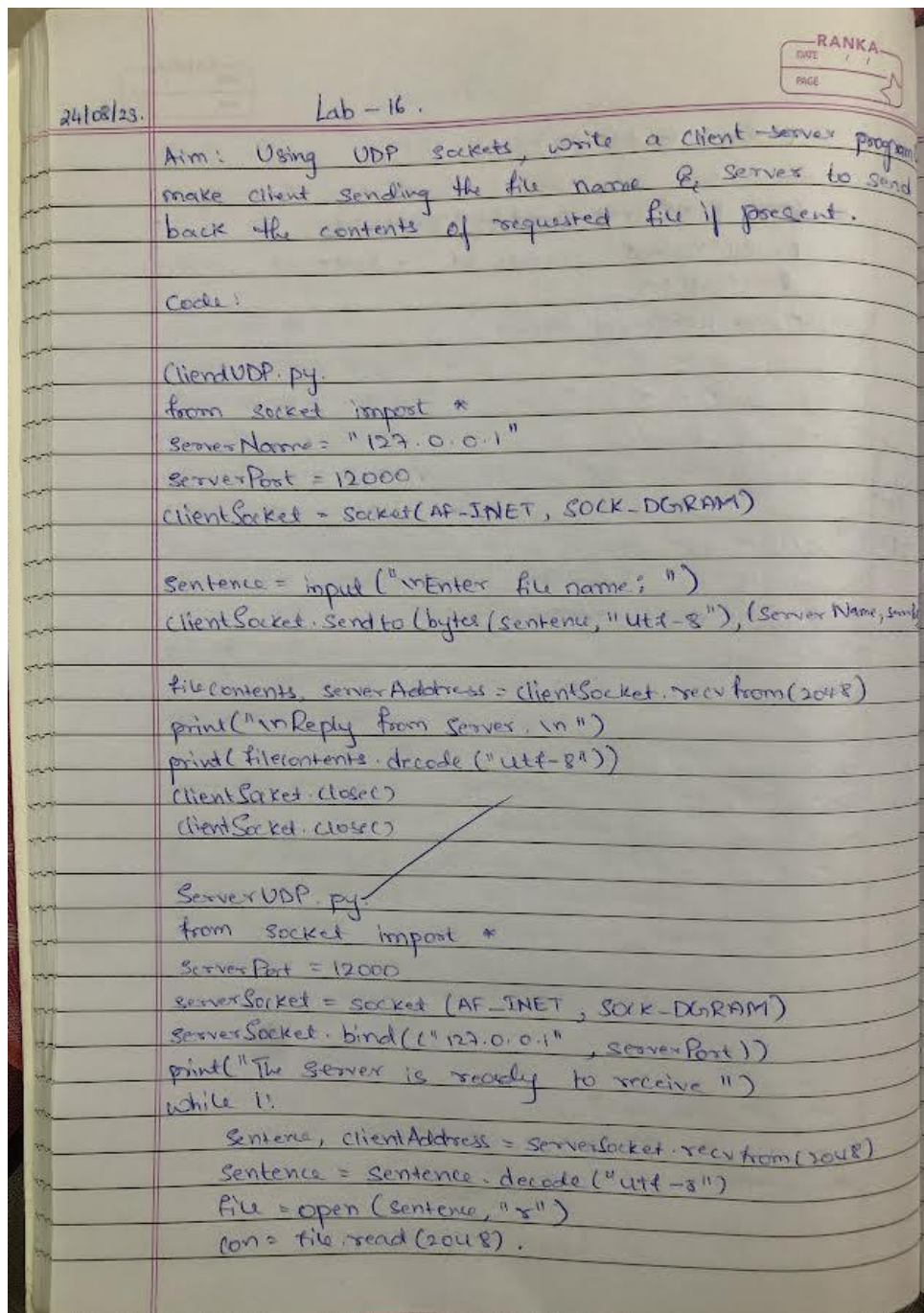


## EXPERIMENT-16

**Question:** 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.

**Program:**



serverSocket.sendto(bytes(100, "utf-8"), clientAddress),

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

print(sentence)

file.close()

MD  
28/8/2023

Code:

Server.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()
```

## Client.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'))
```

```
clientSocket.close()
```

```
clientSocket.close()
```

## Output:

```
clientupd.py - C:/Users/Admin/Desktop/IBM21CS047/CN/clientupd.py (3.10.8)  
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'))  
clientSocket.close()  
clientSocket.close()  
  
>>>  
  
IDLE Shell 3.10.8  
Python 3.10.8 (tags/v3.10.8:aaaf517, Oct 11 2022, 16:50:30) [MSC v.1933 64 bit (AMD64)] on win32  
Type "help", "copyright", "credits" or "license()" for more information.  
===== RESTART: C:/Users/Admin/Desktop/IBM21CS047/CN/clientupd.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()  
  
>>>  
  
serverudp.py - C:/Users/Admin/AppData/Local/Programs/Python/Python310/serverudp.py (3.10.8)  
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()  
  
>>>  
  
IDLE Shell 3.10.8  
Python 3.10.8 (tags/v3.10.8:aaaf517, Oct 11 2022, 16:50:30) [MSC v.1933 64 bit (AMD64)] on win32  
Type "help", "copyright", "credits" or "license()" for more information.  
===== RESTART: C:/Users/Admin/AppData/Local/Programs/Python/Python310/serverudp.py  
>>> The server is ready to receive  
file Sent contents of serverudp.py  
  
>>>
```