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Experiment -16

Program 4:

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.

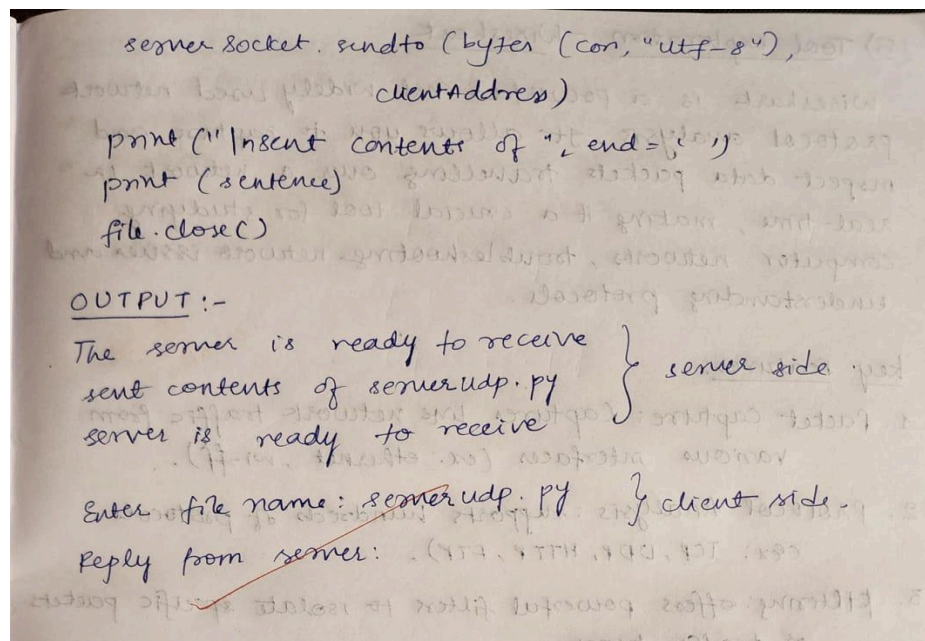
(4) Using UDP sockets, write a client-server program to make client sending the file name and the server to send back the contents of the requested file if present.

udpclient.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()
```

udpserver.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")
```



Code:

udpserver.py file:

```
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()
```

udpclient.py file:

```
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()
```

Output:

```
PS C:\Users\Dell\OneDrive\Desktop\code> python udpserver.py
The server is ready to receive

Sent contents of  example.txt
█
```

```
PS C:\Users\Dell\OneDrive\Desktop\code> python udpclient.py

Enter file name:  example.txt

Reply from Server:

Hello, this is a sample file.
It is used for testing the TCP server.
```