

WEEK 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:

ClientUDP.py

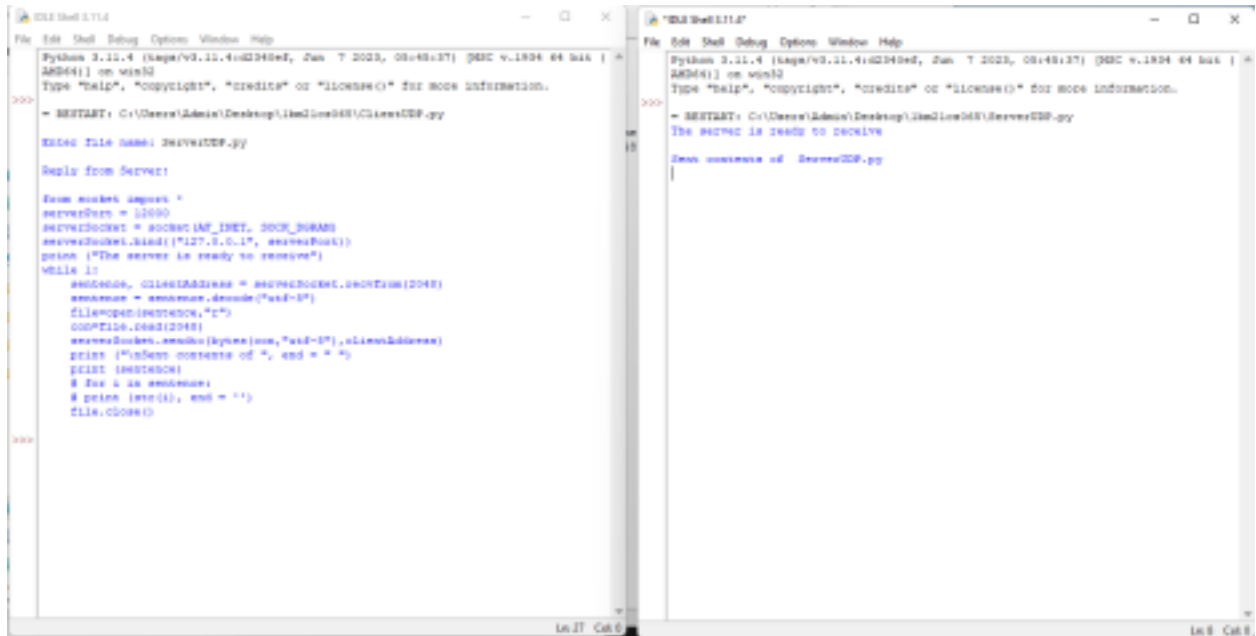
```
from socket import *
serverName = "127.0.0.1"
serverPort = 12000
clientSocket = socket(AF_INET, SOCK_DGRAM)
sentence = input("\nEnter file name: ")
clientSocket.sendto(bytes(sentence,"utf-8"),(serverName, serverPort))
filecontents,serverAddress = clientSocket.recvfrom(2048) print
("\nReply from Server:\n")
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 ("\nSent contents of ", end = " ")
```

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

OUTPUT:



```
Python 3.11.4 (tags/v3.11.4:02448e5, Jan 7 2023, 08:43:37) [AMD64] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:\Users\Admin\Desktop\Idea048\ClientIDLE.py
Enter file name: ServerIDLE.py

Reply from Server:

from socket import *
serverPort = 15550
serverSocket = socket(AF_INET, SOCK_STREAM)
serverSocket.bind(("127.0.0.1", serverPort))
print ("The server is ready to receive")
while 1:
    sockAddr, clientAddress = serverSocket.accept()
    message = message.decode("utf-8")
    clientSocket.send("r")
    clientSocket.send(message)
    print ("InSent contents of ", end = " ")
    print (message)
    # for i in message:
    # print (str(i), end = " ")
    clientSocket.close()
```

```
Python 3.11.4 (tags/v3.11.4:02448e5, Jan 7 2023, 08:43:37) [AMD64] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:\Users\Admin\Desktop\Idea048\ServerIDLE.py
The server is ready to receive

Enter contents of ServerIDLE.py
|
```

OBSERVATION:

16

2) using UDP sockets write a client-server program
make client sending the file name & the server
to send back the contents of the requested file
present.

→ client UDP.py

from socket import *

serverName = '127.0.0.1'

serverPort = 12000

clientSocket = socket(AF_INET, SOCK_DGRAM)

sentence = input("Enter the file name: ")

clientSocket.sendto(bytes(sentence, "utf-8"), (serverName,
serverPort))

fileContents, serverAddress = clientSocket.recvfrom(2048)

print("In Reply from server: In")

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)

while 1:

sentence, clientAddress = serverSocket.recvfrom(2048)

sentence = sentence.decode("utf-8")

file = open(sentence, "r")

```
con = file.read(2048)
serverSocket.send(bytes(con"utf-8"), clientAddress)
print("\n Sent contents of ", end = ' ')
print(sentence)
# for i in sentence
# print i, end = " "
file.close()
```

Output

Server

The Server is ready to receive

Client

The contents requested by server is displayed

22/8