

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

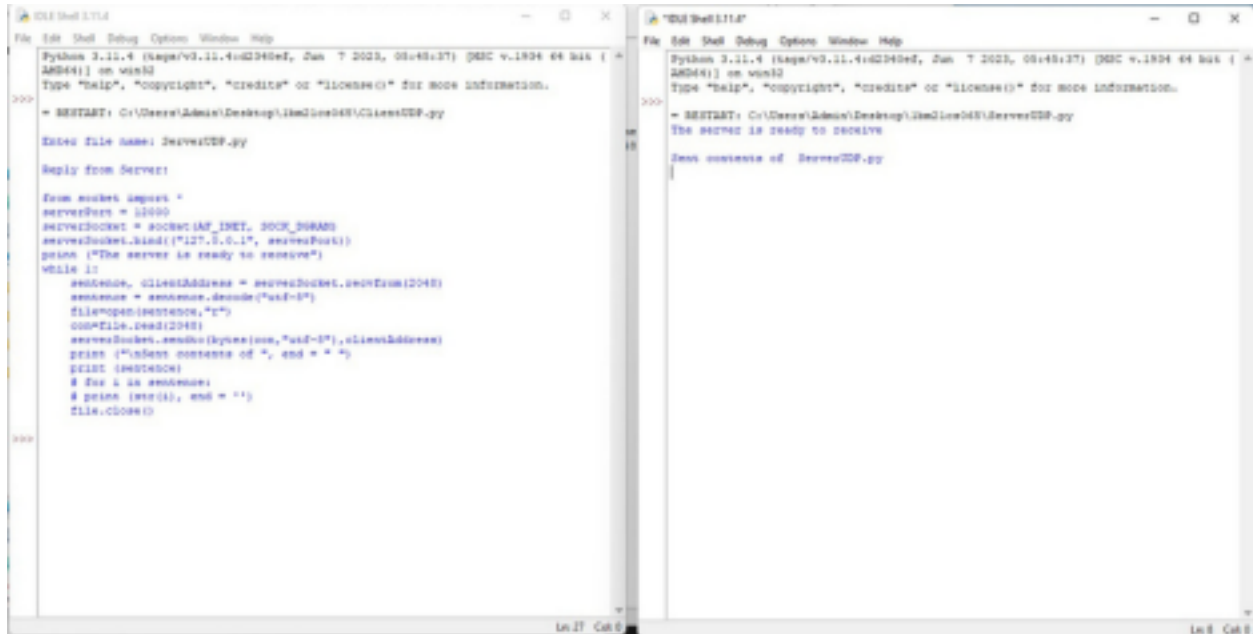
```
from socket import *
serverName = "127.0.0.1"
serverPort = 12000
clientSocket = socket(AF_INET, SOCK_DGRAM)
sentence = input("\nEnter file name: ")
clientSocket.sendto(bytes(sentence,"utf-8"),(serverName,
serverPort)) filecontents,serverAddress =
clientSocket.recvfrom(2048) print ("\nReply from Server:\n")
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/v3.11.4:42340ef, Jan 7 2023, 00:40:37) [MSC v.1934 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.

>>> = RESTART: C:\Users\Admin\Desktop\Idea2023\ServerUDP.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")
    data=file.read(2048)
    serverSocket.sendto(bytes(data,"utf-8"),clientAddress)
    print("Insent contents of ", end = " ")
    print(sentence)
    # For k in sentence:
    # print(str(k), end = " ")
    file.close()

>>>
```

OBSERVATION:

```
file = open(sentence, "r")
d = file.read(1024)
connectionSocket.send(d.encode())
print("\n Sent contents of " + sentence)
file.close()
connectionSocket.close()
```

Output

Server is ready to receive

In client

Enter file name : Server Tcp.py
You server details will come

* 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 *
Server Name = "127.0.0.1"
Server port = 12000
```



```
ClientSocket.send_to(bytes(sentence, "utf-8"),
                      (ServerName, ServerPort))
```

```
filecontents, ServerAddress = ClientSocket.recvfrom(2048)
print("In 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)

    ServerSocket.send_to(bytes(con, "utf-8"), ClientAddress)
    print("In Sent contents of 'send='')
    print(sentence)
```

output

The server is ready to receive

Sent content of ServerUDP.py

The server is ready to receive.

Enter file name : ServerUDP.py

Reply from Server: whole ServerUDP contents.

AL A
2/9/2023