

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.

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.

ClientUDP.py

```
from socket import *
serverName = '127.0.0.1'
serverPort = 12000
clientSocket = socket(AF_INET, SOCK_DGRAM)
sentence = input("Enter 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'))
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("In Sent contents of", end='')
    print(sentence)
    file.close()
```

Server output: The server is ready to receive  
sent contents of serverudp.py

Client output:

Enter file name: serverudp.py

Reply from Server:

contents of serverudp.py

Procedure:

- Run the serverudp.py
- Then run the clientudp.py
- Enter the server file name
- Server file contents will be displayed.

§ 19

## Output:

The image shows two side-by-side Python IDLE 3.10.8 windows. The left window is titled 'serverudp.py' and contains the following code:

```
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()
```

The right window is titled 'clientudp.py' and contains the following code:

```
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()
```

Below the code editors, the IDLE Shell 3.10.8 windows show the execution output. The left shell shows the server output:

```
>>> = RESTART: C:/Users/Admin/AppData/Local/Programs/Python/Python310/serverudp.py =
The server is ready to receive
Sent contents of  serverudp.py
```

The right shell shows the client output:

```
>>> = RESTART: C:/Users/Admin/AppData/Local/Programs/Python/Python310/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))
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()

>>> |
```