

3/1/2025

Program 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.

Observation:

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3/1/25 ((EXPERIMENT-16))

Q Using UDP sockets write client side server
program to make client sending file name and
server to send back contents of requested file
if present.

Server UDP.py
from socket import *
serverPort = 12000
serverSocket = socket(AF_INET, SOCK_DGRAM)
serverSocket.bind(("127.0.0.1", serverPort))
print("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)
    # file is file contents
    # print(stili, end=" ")
    clientSocket.close()
    clientSocket.close()

Client UDP.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"),
 clientName, 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:
 The server is ready to receive
 Sent contents of server 'Server.py' } Server side
 Server is ready to receive }
 Enter file name: Server.py } Client side
 Reply from server:

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()
```

Clienttudp.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()
```

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.
```