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Experiment 4

Aim:-

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.

Code:-

1. Client UDP.py

```
from socket import*
serverName = "127.0.0.1"
serverPort = 12000
clientSocket = socket(AF_INET, SOCK_DGRAM)

sentence = input("\n Enter file name:")
clientSocket = sendto(bytes(sentence, "utf-8"),
(serverName, serverPort))
fileContents, serverAddress = clientSocket.recvfrom(2048)
print("\n Reply from Server:\n")
print(fileContents.decode("utf-8"))
# for i in fileContents:
# print (str(i), end = "")
clientSocket.close()
ClientSocket.close()
```

2. 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.sendto(bytes(con, "utf-8"), clientAddress)

print('\n Sent contents of ', end = ' ')
    print (sentence)
    # for i in sentence:
        # print (str(i), end = '')
    file.close()
```

output:

when you run ServerUDP.py

The server is ready to receive

when you run ClientUDP.py

Enter file name: serverUDP.py
Reply from server:
(The files from serverUDP.py will be copied and displayed here)

In ServerUDP.py
The server is ready to receive

Sent contents of serverUDP.py
The server is ready to receive

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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: