

Using UDP socket, write a client-server ^{program} to make client send the file name & the server send back the contents of the request file if it exists.

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"))
```

```
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("\n Sent Contents of ", end = ' ')
print(sentence)

file.close()

The server is ready to receive

Sent contents of server UDP. Py
The server is ready to receive

2048)

Server UDP output.

Enter the file name: ServerUDP.py

Reply from server:

/s

Contents of the file are
displayed here

/s

10/10

9/9/22

2048)

```
serverudp.py - C:/Users/Admin/AppData/Local/Programs/Python/Python310/serverudp.py [...]  
File Edit Format Run Options Window Help  
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()
```

```
IDLE Shell 3.10.8  
File Edit Shell Debug Options Window Help  
Python 3.10.8 (tags/v3.10.8:aaaf517, Oct 11 2022, 16:50:30) [MSC v.1933 64 bit (AMD64)] on win32  
Type "help", "copyright", "credits" or "license()" for more information.  
>>>  
= RESTART: C:/Users/Admin/AppData/Local/Programs/Python/Python310/serverudp.py =  
The server is ready to receive  
Sent contents of serverudp.py
```

```
clientudp.py - C:/Users/Admin/AppData/Local/Programs/Python/Python310/clientudp.py [...]  
File Edit Format Run Options Window Help  
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()
```

```
IDLE Shell 3.10.8  
File Edit Shell Debug Options Window Help  
Python 3.10.8 (tags/v3.10.8:aaaf517, Oct 11 2022, 16:50:30) [MSC v.1933 64 bit (AMD64)] on win32  
Type "help", "copyright", "credits" or "license()" for more information.  
>>>  
= 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()  
>>>
```