Title:

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:

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:

```
/Users/mac/PycharmProjects/cn-lab/venv/bin/python /Users/mac/PycharmProjects/cn-lab/ServerUDP.py
The server is ready to receive
```

```
/Users/mac/PycharmProjects/cn-lab/venv/bin/python /Users/mac/PycharmProjects/cn-lab/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()


Process finished with exit code 0
```

```
/Users/mac/PycharmProjects/cn-lab/venv/bin/python /Users/mac/PycharmProjects/cn-lab/ServerUDP.py
The server is ready to receive

Sent contents of  ServerUDP.py
```