

2. 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.

Q. Using UDP sockets, write a client-server program to make client sending the file name & the server to send back the contents of the requested file if present.

Solution:

Client.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()
```

Server.py

```
import socket
```

```
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")
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:

Server → The server is ready to receive  
Sent Contents of Server.py.  
The server is ready to receive.

Client → Client.py

Enter file name: Server.py

Reply from Server:

from socket import \*

Server port - 12000

Serversocket = socket(AF\_INET, SOCK\_DGRAM)

Serversocket.bind(("127.0.0.1", ServerPort))

while 1:

print("The server is ready to receive")

Sentence, clientAddress = Serversocket.recvfrom(2048)

Sentence = Sentence.decode("utf-8")

file = open(Sentence, "r")

l = file.read(2048)

Serversocket.sendto(bytes(l, "utf-8"), clientAddress)

print('\n sent Contents of', end = ' ')

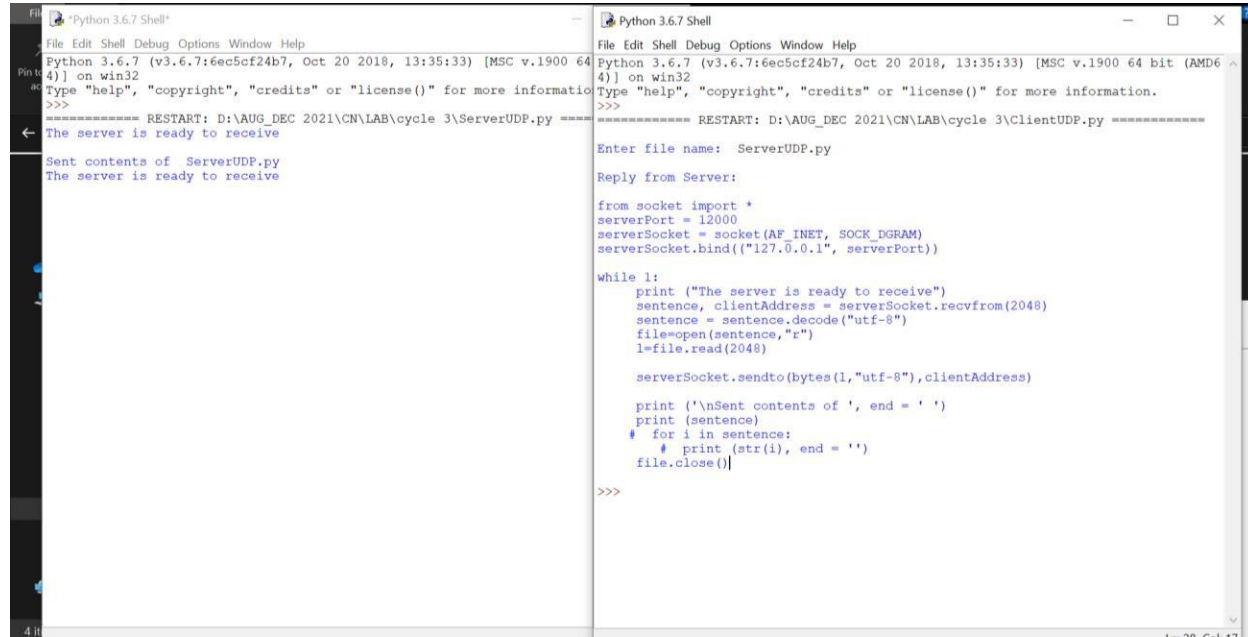
print(Sentence)



```
# for i in sentence:  
    # print (&lt;str(i), end=' ')  
file.close()
```

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## OUTPUT:



The image shows two side-by-side Python 3.6.7 Shell windows. The left window displays the output of a server script, and the right window displays the code and output of a client script.

```
Python 3.6.7 Shell
File Edit Shell Debug Options Window Help
Python 3.6.7 (v3.6.7:6ec5cf24b7, Oct 20 2018, 13:35:33) [MSC v.1900 64
4)] on win32
Type "help", "copyright", "credits" or "license()" for more informatio
>>>
===== RESTART: D:\AUG_DEC 2021\CN\LAB\cycle 3\ServerUDP.py =====
< The server is ready to receive
Sent contents of ServerUDP.py
The server is ready to receive
```

```
Python 3.6.7 Shell
File Edit Shell Debug Options Window Help
Python 3.6.7 (v3.6.7:6ec5cf24b7, Oct 20 2018, 13:35:33) [MSC v.1900 64 bit (AMD6
4)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: D:\AUG_DEC 2021\CN\LAB\cycle 3\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))

while 1:
    print ("The server is ready to receive")
    sentence, clientAddress = serverSocket.recvfrom(2048)
    sentence = sentence.decode("utf-8")
    file=open(sentence,"r")
    l=file.read(2048)

    serverSocket.sendto(bytes(l,"utf-8"),clientAddress)

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

>>>
```

