

WEEK 16

Using UDP sockets, write a client-server program to make the client send 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

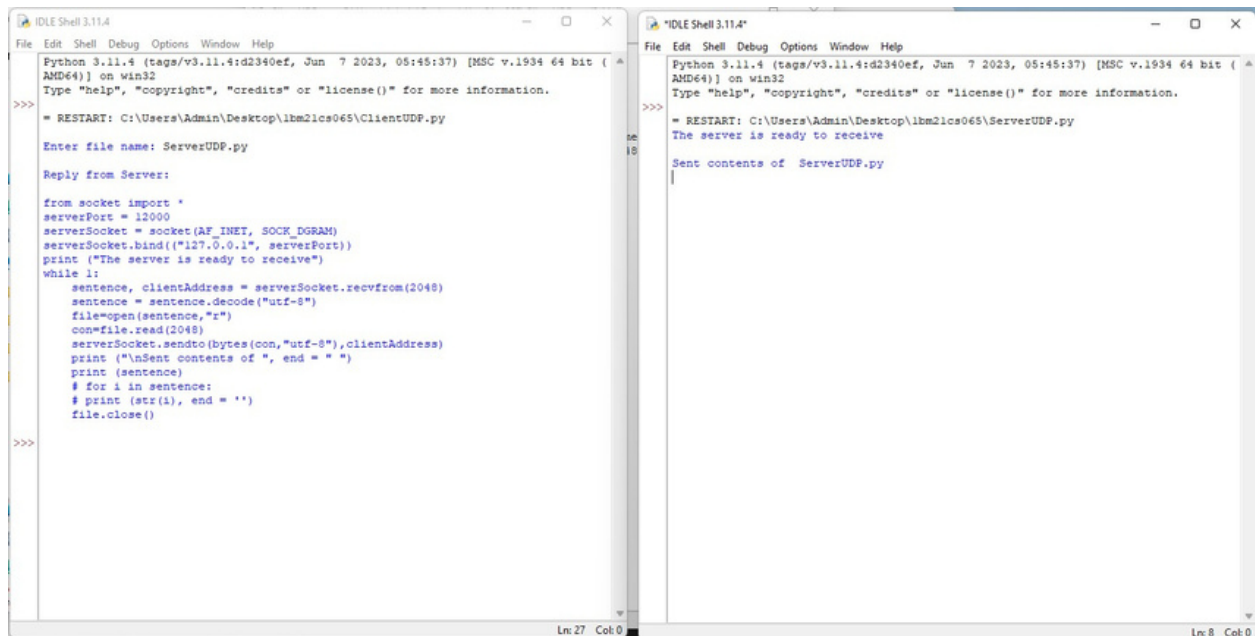
```
from socket import *
serverPort = 12000
serverSocket = socket(AF_INET, SOCK_DGRAM)
serverSocket.bind(("127.0.0.1", serverPort))
print ("The server is ready to receive")
while 1:
sentence, clientAddress = serverSocket.recvfrom(2048)
sentence = sentence.decode("utf-8")
```

```

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:



The image shows two side-by-side screenshots of the IDLE Shell 3.11.4 window. The left window displays the Python code for a server script, and the right window shows the output of the script.

Left Window (Code):

```

Python 3.11.4 (tags/v3.11.4:d2340ef, Jun 7 2023, 05:45:37) [MSC v.1934 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> = RESTART: C:\Users\Admin\Desktop\lhm2lcs065\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()
>>>

```

Right Window (Output):

```

Python 3.11.4 (tags/v3.11.4:d2340ef, Jun 7 2023, 05:45:37) [MSC v.1934 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> = RESTART: C:\Users\Admin\Desktop\lhm2lcs065\ServerUDP.py
The server is ready to receive
Sent contents of ServerUDP.py
|

```

OBSERVATION:

- * 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.

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

Output

The server is ready to receive

Sent contents of ServerUDP.py

The server is ready to receive

Enter file name: ServerUDP.py

Reply from Server)

whole ServerUDP contents