

EXPERIMENT- 15

Using TCP/IP 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.

Experiment- 15

Aim: Using TCP/IP sockets, write a client-server program to make client requesting file name and server sending contents of the requested file.

(Client TCP.py)

```
from socket import *

name = "127.0.0.1"
port = 12000
socket = socket(AF_INET, SOCK_STREAM)
socket.connect((name, port))
message = input("Enter file to be received")
socket.send(message.encode())
received = socket.recv(1024).decode()
print("File contents " + received)
socket.close()
```

server^{TCP}.py

```
from socket import *

name = "127.0.0.1"
port = 12000
socket = socket(AF_INET, SOCK_STREAM)
socket.bind((name, port))
socket.listen(1)
while 1:
    print("Ready to receive")
    socket, addr = socket.accept()
```

Date _____ Page _____

```
sentence = socket.recv(1024).decode  
file = open ( sentence, 'a')  
d = file.read(1024)  
socket.send (d.encode())  
print("Sent contents")  
file.close()  
socket.close()
```

Output:

Server:

Ready to receive
Sent contents

Client:

Enter file to be received

~~Server.py~~

~~Reply for~~ File contents

// contents of server.py

Code:

Client:

```
from socket import *

socket=socket(AF_INET,SOCK_STREAM)
socket.connect(("192.168.238.1",3000))
ask=input("Enter file name ")
socket.send(ask.encode())
print(socket.recv(1024).decode())
socket.close()
```

Server:

```
from socket import *

socket=socket(AF_INET,SOCK_STREAM)
socket.bind(("192.168.238.1",3000))
socket.listen()
while True:
    client,address=socket.accept()
    message=client.recv(1024).decode()
    file=open(message,'r')
    l=file.read(1024)
    client.send(l.encode())
    file.close()
    client.close()
```

Result:

```
Python 3.7.3 Shell
File Edit Shell Debug Options Window Help
Python 3.7.3 (v3.7.3:ef4ec6ed12, Mar 25 2019, 21:26:53) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\bmsce\Desktop\030\CN\server.py =====
server online
Contents server.py
server online

Python 3.7.3 Shell
File Edit Shell Debug Options Window Help
Python 3.7.3 (v3.7.3:ef4ec6ed12, Mar 25 2019, 21:26:53) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\bmsce\Desktop\030\CN\client.py =====
Enter file to be received server.py
Traceback (most recent call last):
  File "C:\Users\bmsce\Desktop\030\CN\client.py", line 7, in <module>
    socket.send(message.encode())
NameError: name 'message' is not defined
>>>
===== RESTART: C:\Users\bmsce\Desktop\030\CN\client.py =====
Enter file to be received server.py
File contents from socket import *

name="127.0.0.1"
port=12000
socket=socket(AF_INET,SOCK_STREAM)
socket.bind((name,port))
socket.listen(1)

while True:
    print("server online")
    connection,address=socket.accept()
    receiving=connection.recv(1024).decode()
    file=open(receiving,"r")
    l=file.read(1024)
    connection.send(l.encode())
    print("Contents "+ receiving)
    file.close()
    connection.close()

>>>
```

Activate Windows
Go to Settings to activate Windows.