

CYCLE 2 PROGRAM 3

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.

Code:

Server.py:

```
from socket import *
```

```
serverName =
```

```
'127.0.0.1'
```

```
serverPort = 12000
```

```
serverSocket =
```

```
socket(AF_INET, SOCK_STREAM)
```

```
serverSocket.bind((serverName, serverPort))
```

```
serverSocket.listen(1)
```

```
while True:
```

```
    print("The Server is ready to receive")
```

```
    connectionSocket, addr = serverSocket.accept()
```

```
    sentence = connectionSocket.recv(1024).decode()
```

```
    file = open(sentence, "r")
```

```
    l=file.read(1024)
```

```
    conectionSocket.send(l.encode())
```

```
    ) print("\nSent contets of
```

```
    "+sentence)file=close()
```

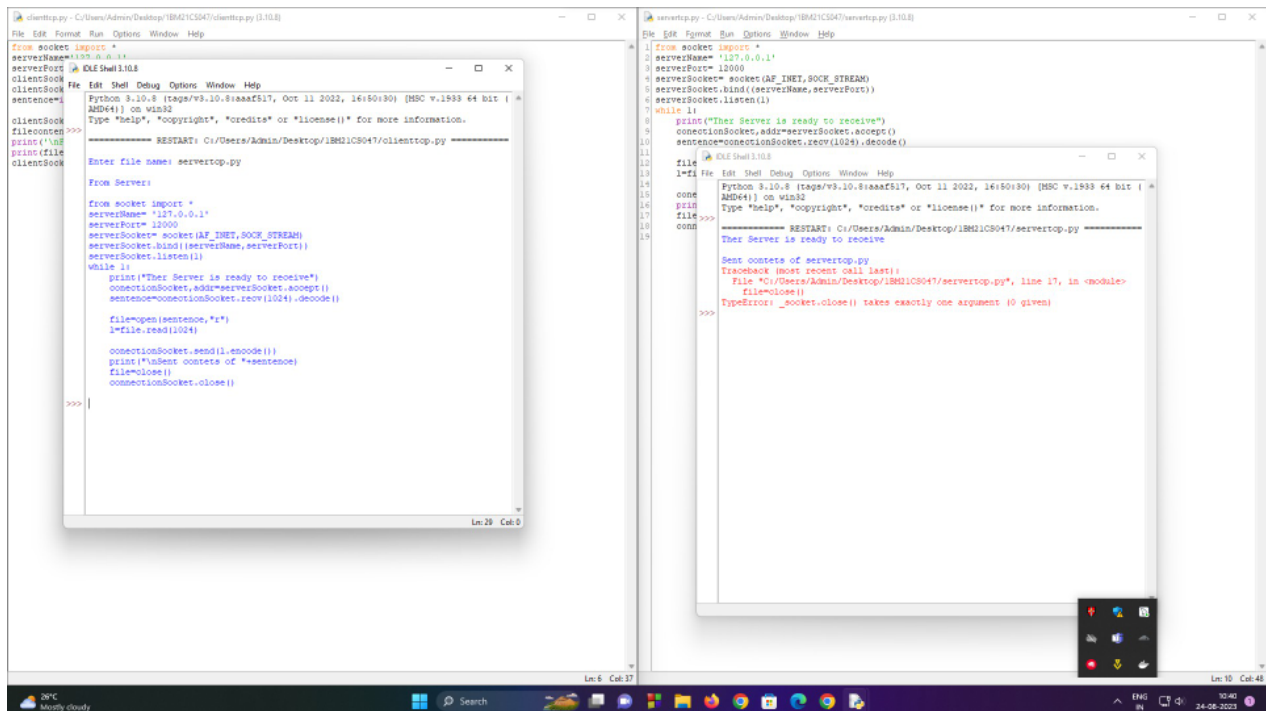
```
    connectionSocket.close()
```

Client.py:

```
from socket import *
serverName='127.0.0.1'
serverPort=12000
clientSocket=socket(AF_INET, SOCK_STREAM)
clientSocket.connect((serverName,serverPort))
sentence=input("\nEnter file name: ")

clientSocket.send(sentence.encode())
filecontents=clientSocket.recv(1024).decode()
print("\nFrom Server:\n")
print(filecontents)
clientSocket.close()
```

Output:



```
clienttop.py - C:/Users/Admin/Desktop/IBM21CS047/clienttop.py (3.10.8)
File Edit Format Run Options Window Help
from socket import *
serverName='127.0.0.1'
serverPort=12000
clientSocket=socket(AF_INET, SOCK_STREAM)
clientSocket.connect((serverName,serverPort))
sentence=input("\nEnter file name: ")
clientSocket.send(sentence.encode())
filecontents=clientSocket.recv(1024).decode()
print("\nFrom Server:\n")
print(filecontents)
clientSocket.close()

Python 3.10.8 [tags/v9.10.8:aaaf517, Oct 11 2022, 16:50:30] [MSC v.1933 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
Enter file name: servertop.py

From Server:
from socket import *
serverName='127.0.0.1'
serverPort=12000
serverSocket=socket(AF_INET, SOCK_STREAM)
serverSocket.bind((serverName, serverPort))
serverSocket.listen(1)
while 1:
    print("The Server is ready to receive")
    connectionSocket, addr=serverSocket.accept()
    sentence=connectionSocket.recv(1024).decode()

    file=open(sentence, "r")
    l=file.read(1024)

    connectionSocket.send(l.encode())
    print("Sent contents of " + sentence)
    file.close()
    connectionSocket.close()

>>>

Restart: C:/Users/Admin/Desktop/IBM21CS047/clienttop.py

servertop.py - C:/Users/Admin/Desktop/IBM21CS047/servertop.py (3.10.8)
File Edit Format Run Options Window Help
1 from socket import *
2 serverName='127.0.0.1'
3 serverPort=12000
4 serverSocket=socket(AF_INET, SOCK_STREAM)
5 serverSocket.bind((serverName, serverPort))
6 serverSocket.listen(1)
7 while 1:
8     print("The Server is ready to receive")
9     connectionSocket, addr=serverSocket.accept()
10    sentence=connectionSocket.recv(1024).decode()
11
12    file=open(sentence, "r")
13    l=file.read(1024)
14
15    connectionSocket.send(l.encode())
16    print("Sent contents of " + sentence)
17    file.close()
18    connectionSocket.close()
19

Python 3.10.8 [tags/v9.10.8:aaaf517, Oct 11 2022, 16:50:30] [MSC v.1933 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
The Server is ready to receive
Sent contents of servertop.py
Traceback (most recent call last):
  File "C:/Users/Admin/Desktop/IBM21CS047/servertop.py", line 17, in <module>
    file.close()
TypeError: _socket.close() takes exactly one argument (0 given)

>>>
```