CN LAB
CYCLE 2
Mallika Prasad
1BM19CS081

PROGRAM 5

Using TCP/IP sockets, write a client server program to make client sending the filename and the server to send back the contents of the requested file if present.

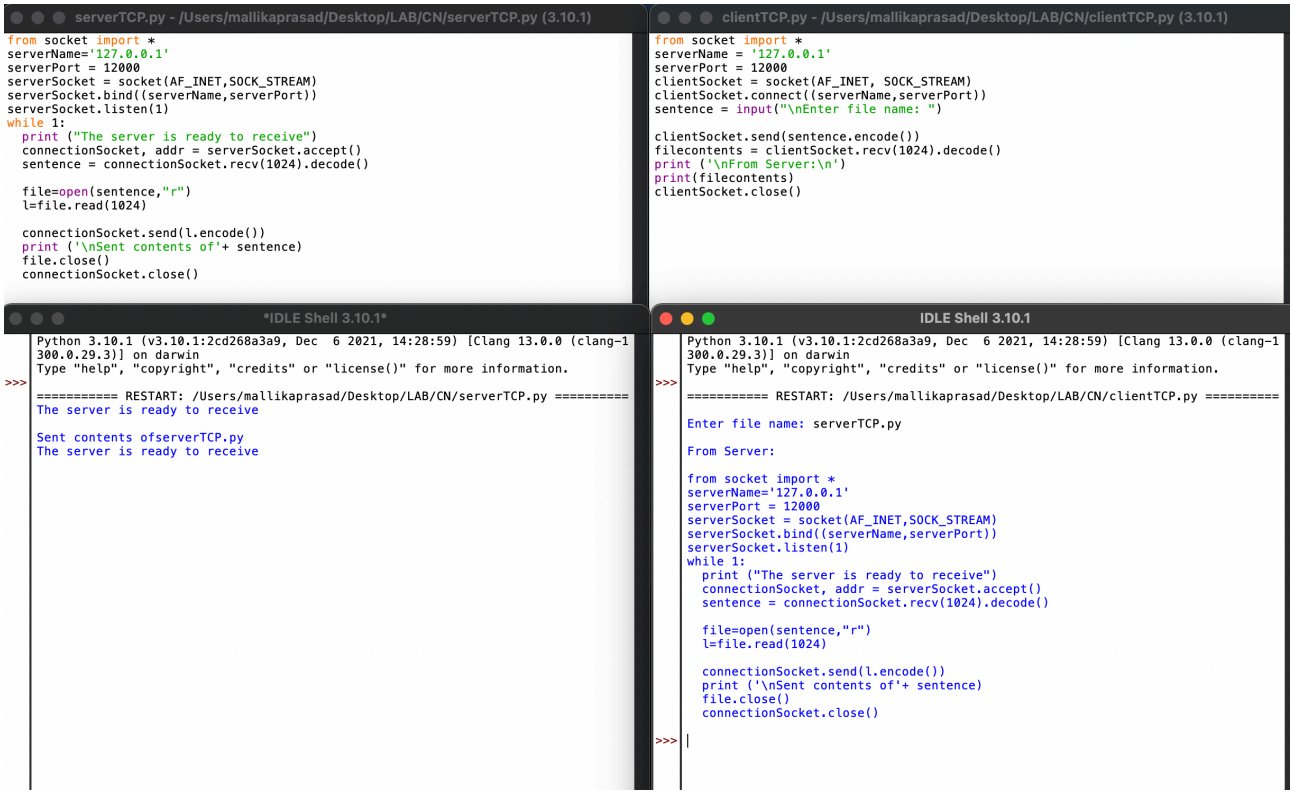
serverTCP.py

```
from socket import *
serverName="127.0.0.1"
serverPort = 12000
serverSocket = socket(AF_INET,SOCK_STREAM)
serverSocket.bind((serverName,serverPort))
serverSocket.listen(1)
while 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 ('\nSent contents of'+ sentence)
  file.close()
  connectionSocket.close()
```

clientTCP.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



serverTCP.py - /Users/mallikaprasad/Desktop/LAB/CN/serverTCP.py (3.10.1)

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

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

  connectionSocket.send(l.encode())
  print ('\nSent contents of'+ sentence)
  file.close()
  connectionSocket.close()
```

clientTCP.py - /Users/mallikaprasad/Desktop/LAB/CN/clientTCP.py (3.10.1)

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

IDLE Shell 3.10.1

```
Python 3.10.1 (v3.10.1:2cd268a3a9, Dec  6 2021, 14:28:59) [Clang 13.0.0 (clang-1
300.0.29.3)] on darwin
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: /Users/mallikaprasad/Desktop/LAB/CN/serverTCP.py ==========
The server is ready to receive

Sent contents ofserverTCP.py
The server is ready to receive
```

IDLE Shell 3.10.1

```
Python 3.10.1 (v3.10.1:2cd268a3a9, Dec  6 2021, 14:28:59) [Clang 13.0.0 (clang-1
300.0.29.3)] on darwin
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: /Users/mallikaprasad/Desktop/LAB/CN/clientTCP.py ==========

Enter file name: serverTCP.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)
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  file=open(sentence,"r")
  l=file.read(1024)

  connectionSocket.send(l.encode())
  print ('\nSent contents of'+ sentence)
  file.close()
  connectionSocket.close()

>>>
```