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.

Q. Using TCP/IP 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.

Client program.

ClientTCP.py.

```
from Socket import *
ServerName = '127.0.0.1'
ServerPort = 12000
ClientSocket = Socket(AF_INET, SOCK_STREAM)
ClientSocket.Connect((ServerName, ServerPort))
Sentence = input("\n Enter file name:")

ClientSocket.Send(Sentence.encode())
fileContents = ClientSocket.recv(1024).decode()
print("file \n From Server:\n")
print(fileContents)
ClientSocket.close()
```

Server.py program

```
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()
```

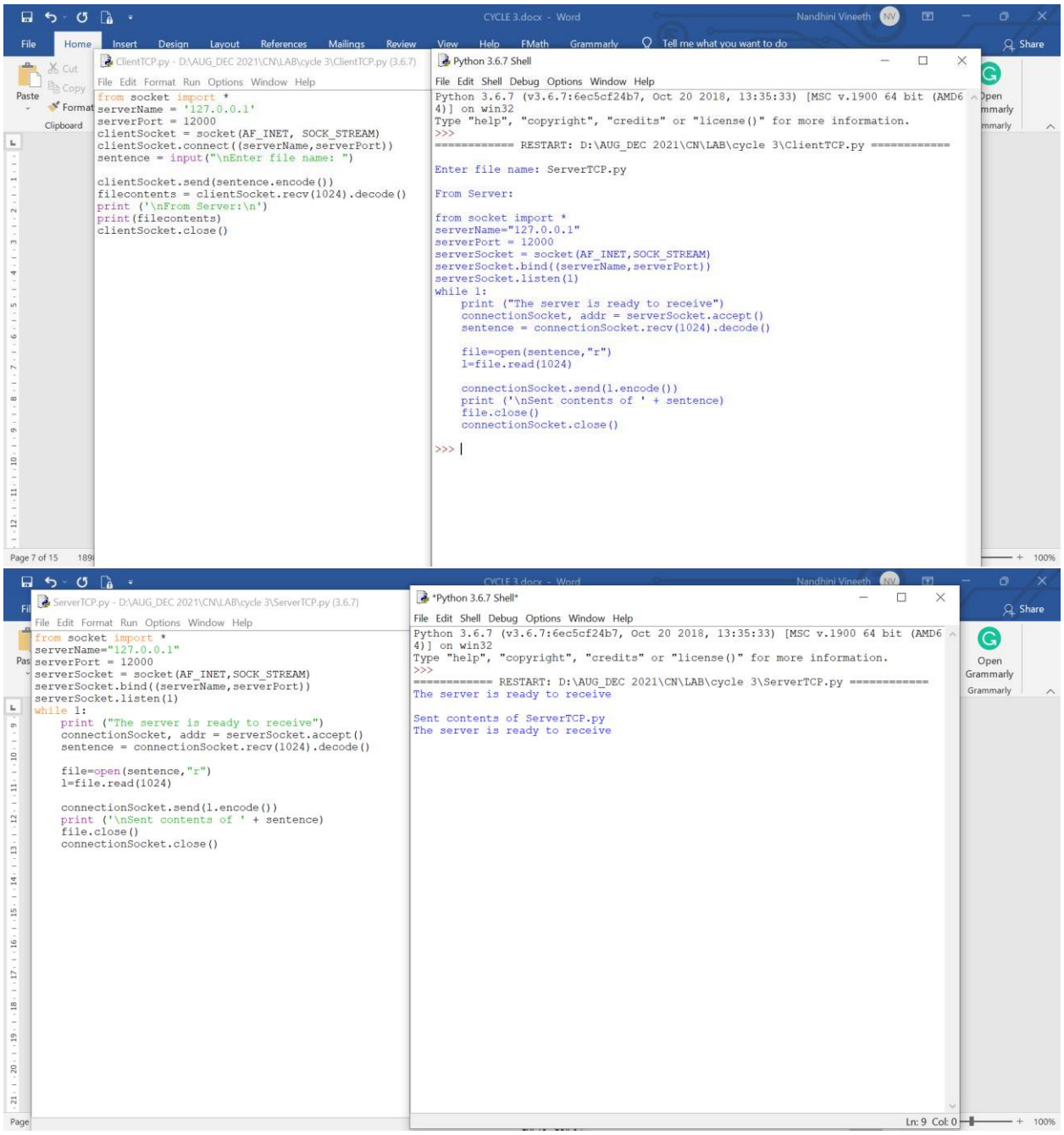
```
    Sentence = ConnectionSocket.recv(1024).decode()
    file = open(Sentence, "r")
file = open(Sentence, "r")
l = file.read(1024)
ConnectionSocket.send(l.encode())
print('\n Sent Contents of' + Sentence)
file.close()
ConnectionSocket.close()
```

Output:

Server → The Server is ready to receive.
Sent Contents of Server.py.
Client → Enter file name: Server.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('\n Sent Contents of' + Sentence)
    file.close()
    ConnectionSocket.close()
```

OUTPUT:


CYCLE 3.docx - Word
Nandhini Vineeth
ClientTCP.py - D:\AUG_DEC 2021\CN\LAB\cycle 3\ClientTCP.py (3.6.7)
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 3.6.7 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 (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: D:\AUG_DEC 2021\CN\LAB\cycle 3\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)
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()
>>>
ServerTCP.py - D:\AUG_DEC 2021\CN\LAB\cycle 3\ServerTCP.py (3.6.7)
File Edit Format Run Options Window Help
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")
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connectionSocket.send(l.encode())
print ('\nSent contents of ' + sentence)
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Python 3.6.7 Shell
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Python 3.6.7 (v3.6.7:6ec5cf24b7, Oct 20 2018, 13:35:33) [MSC v.1900 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: D:\AUG_DEC 2021\CN\LAB\cycle 3\ServerTCP.py ==========
The server is ready to receive
Sent contents of ServerTCP.py
The server is ready to receive
Ln: 9 Col: 0