1. 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.

```
2. Client.py
 from socket import *
 serverName = "127.0.0.1"
 serverPort = 12000
 clientSocket = socket(AF_INET, SOCK_STREAM)
 clientSocket.connect((serverName,serverPort))
 sentence = input("Enter file name")
 clientSocket.send(sentence.encode())
 filecontents = clientSocket.recv(1024).decode()
 print ('From Server:', filecontents)
 clientSocket.close()
 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)
 print ("The server is ready to receive")
 while 1:
 connectionSocket, addr = serverSocket.accept()
 sentence = connectionSocket.recv(1024).decode()
 file=open(sentence,"r")
 l=file.read(1024)
 connectionSocket.send(l.encode())
 file.close()
 connectionSocket.close()
OUTPUT:=
The server is ready to receive
sent back to client hello world!!
Enter file nameexample.txt
```

From Server: b'hello world!!'

Observation:=

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   of the requested the it presen
     solution-
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  from socket import *
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    file contents = chent socket near (1024). cheerdess
    (sunt ( from server! , filecontents)
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    Berver-Py
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    Server Name = " 127.0.0.1"
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                from server: Lecontent of example. +++> } chent
  Output = Enter file Name = exemple. The
            from server Hello world
                Serveris ready to recive & & Server
                  sent back to client Hellio world
```

2. 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. program:=

ClientUDP.py

```
from socket import *
serverName = "127.0.0.1"
serverPort = 12000
clientSocket = socket(AF_INET, SOCK_DGRAM)

sentence = input("Enter file name")
clientSocket.sendto(bytes(sentence,"utf-8"),(serverName, serverPort))
filecontents,serverAddress = clientSocket.recvfrom(2048)
print ('From Server:', filecontents)

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)

file=open(sentence, "r")
    l=file.read(2048)

serverSocket.sendto(bytes(l, "utf-8"), clientAddress)
    print("sent back to client", l)
file.close()
```

Output:=

```
The server is ready to receive sent back to client hello world!!

Enter file nameexample.txt
From Server: b'hello world!!'
```

Observation:=

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(2) using UBP sockets, write a chient-server program to make chent
   sending the file name and the cerver to send back
  the contents of the request file if present
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    from socked import
    Server Name = " 127.00.1"
    serverporta 12000
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     Bendence = input ("Enter file name")
     Chient socket. send to Chytes ( Sentence, "off-e"), (servernance,
           serverport))
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     print ('from server', filecontents)
     client socker. dosers
    Server UDP. Py
     from socked import "
      generport = 12000
  server socket-socket (AF - INET, sock - DELARM)
     server socket. bind (("127.0.0.1", serverport))
      point ( server 13 ready 4)
       while 1:
          Sentence, dient Address = server Sucket . recr trum (2029)
        file = open (sentence, "r")
        1 = file . read (2024)
        server socket send to (bytes (1, "Unf- 8"), dien Address)
        Bont ("send back to chien", 1)
      file, closes off-
                   The server is ready tomas - 1 yearver
                     from server: b' tello world ! 1-10}
                     sen back to client heltoworld ! I y server
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