

TCP

server

```
import socket.
```

```
serverName = '127.0.0.1'
```

```
serverPort = 12345
```

```
server_socket = socket.socket(socket.AF_INET,  
                                socket.SOCK_STREAM)
```

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

```
server_socket.listen(5)
```

```
while True:
```

```
    print("server waiting")
```

```
    client_socket, addr = server_socket.accept()
```

```
    print("Client: ", addr)
```

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

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

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

```
    client_socket.send(l.encode())
```

```
    file.close()
```

```
    client_socket.close()
```

client

```
import socket
```

```
client_socket = socket.socket(socket.AF_INET,  
                                socket.SOCK_STREAM)
```

```
client_socket.connect(('127.0.0.1', 12345))
```

```
sentence = input("Enter file name: ")
```

```
client_socket.send(sentence.encode())
```

```
file = client_socket.recv(1024).decode()
```

```
print("From server: ", file)
```

```
client_socket.close()
```

UDP

server

```
import socket
UDPserverSocket = socket.socket(socket.AF_INET,
                                socket.SOCK_DGRAM)

UDPserverSocket.bind(('127.0.0.1', 12345))

print("UDP server up & listening")

while True:
    sentence, addr = UDPserverSocket.recvfrom(2048)
    file = open(sentence, "r")
    l = file.read(2048)
    UDPserverSocket.sendto(l, 'utf-8', addr)
    print("sent to client: ", l)
    file.close()
```

client:

```
import socket
UDPclientSocket = socket.socket(socket.AF_INET,
                                socket.SOCK_DGRAM)

sentence = input("Enter file name:")
UDPclientSocket.sendto(bytes(sentence, 'utf-8'),
                       ('127.0.0.1', 12345))

filec, addr = UDPclientSocket.recvfrom(2048)
print("file contents: ", filec)
UDPclientSocket.close()
```