

Tcp-server.py

```
import socket

if __name__ == '__main__':
    host = '127.0.0.1'
    port = 8081
    totalclient = int(input('Enter number of clients: '))

    sock = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
    sock.bind((host, port))
    sock.listen(totalclient)
    connections = []
    print('Initiating clients')
    for i in range(totalclient):
        conn = sock.accept()
        connections.append(conn)
        print('Connected with client', i+1)

    fileno = 0
    idx = 0
    for conn in connections:
        idx += 1
        data = conn[0].recv(1024).decode()

        if not data:
            continue

        filename = 'output'+str(fileno)+'.txt'
        fileno = fileno+1
        fo = open(filename, "w")
        while data:
            if not data:
                break
            else:
                fo.write(data)
                data = conn[0].recv(1024).decode()

        print()
        print('Receiving file from client', idx)
        print()
        print('Received successfully! New filename is:', filename)
        fo.close()

    for conn in connections:
        conn[0].close()
```

Tcp-client.py

```
import socket

# Creating Client Socket
if __name__ == '__main__':
    host = '127.0.0.1'
    port = 8081

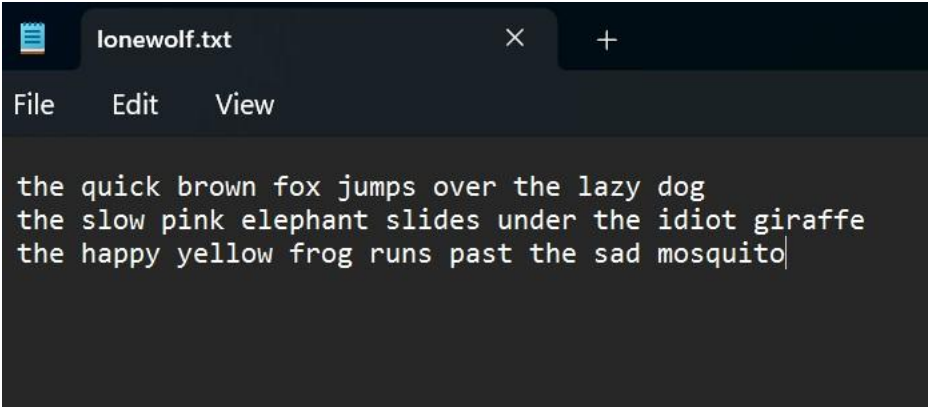
    sock = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
# Connecting with Server
    sock.connect((host, port))

    while True:

        filename = input('Input filename you want to send: ')
        try:
            # Reading file and sending data to server
            fi = open(filename, "r")
            data = fi.read()
            if not data:
                break
            while data:
                sock.send(str(data).encode())
                data = fi.read()
            # File is closed after data is sent
            fi.close()

        except IOError:
            print('You entered an invalid filename! Please enter a valid name')
```

Shared File:



The screenshot shows a text editor window with a dark theme. The title bar at the top indicates the file is named 'lonewolf.txt'. Below the title bar is a menu bar with 'File', 'Edit', and 'View' options. The main text area contains three lines of text in a monospaced font: 'the quick brown fox jumps over the lazy dog', 'the slow pink elephant slides under the idiot giraffe', and 'the happy yellow frog runs past the sad mosquito'. The cursor is positioned at the end of the third line.

```
lonewolf.txt
File Edit View
the quick brown fox jumps over the lazy dog
the slow pink elephant slides under the idiot giraffe
the happy yellow frog runs past the sad mosquito
```

🚦 Output:

```
Microsoft Windows [Version 10.0.22631.4249]
(c) Microsoft Corporation. All rights reserved.

E:\Aissms\T.Y\Network Laboratory\Exp 7>python tcp-server.py
Enter number of clients: 2
Initiating clients
Connected with client 1
|
```

```
E:\Aissms\T.Y\Network Laboratory\Exp 7>python tcp-client.py
Input filename you want to send: lonewolf.txt
Input filename you want to send: |
```

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