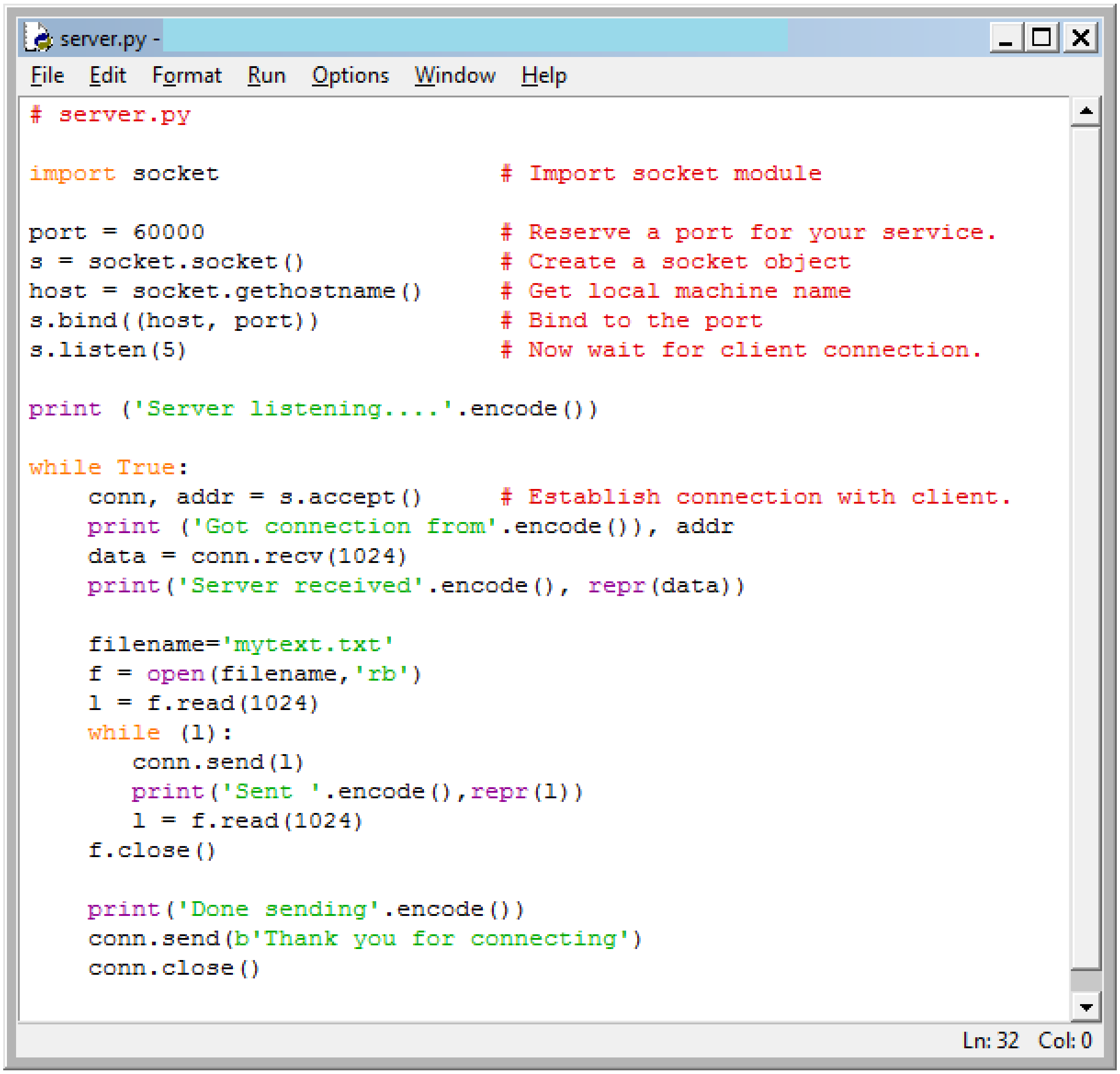
Local file transfer

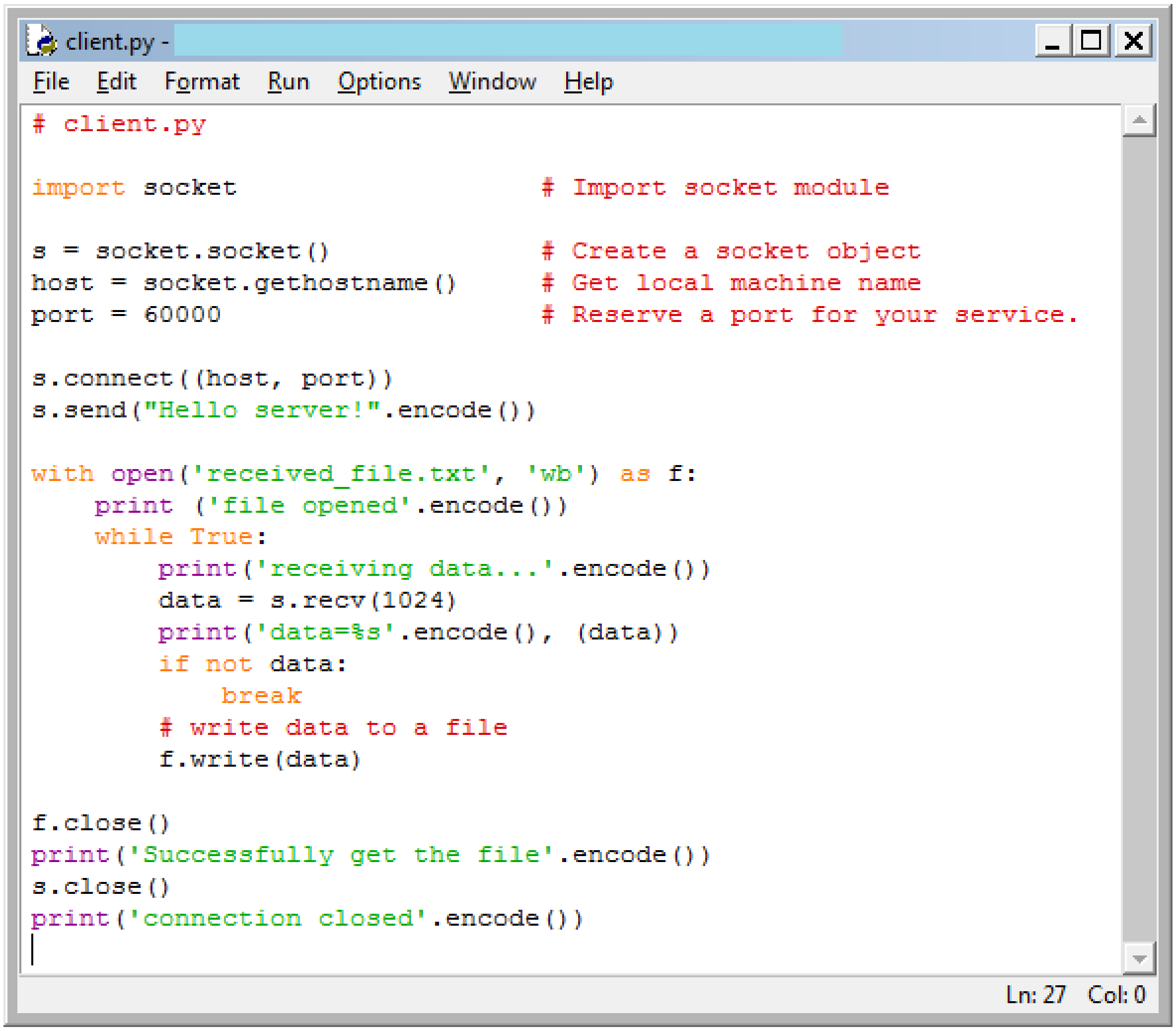
Here is the code to send a file from a local server to a local client.

1. Server



```
# server.py

import socket                   # Import socket module

port = 60000                    # Reserve a port for your service.
s = socket.socket()             # Create a socket object
host = socket.gethostname()     # Get local machine name
s.bind((host, port))            # Bind to the port
s.listen(5)                     # Now wait for client connection.

print ('Server listening....'.encode())

while True:
    conn, addr = s.accept()     # Establish connection with client.
    print ('Got connection from'.encode()), addr
    data = conn.recv(1024)
    print('Server received'.encode(), repr(data))

    filename='mytext.txt'
    f = open(filename,'rb')
    l = f.read(1024)
    while (l):
       conn.send(l)
       print('Sent '.encode(),repr(l))
       l = f.read(1024)
    f.close()

    print('Done sending'.encode())
    conn.send(b'Thank you for connecting')
    conn.close()
```

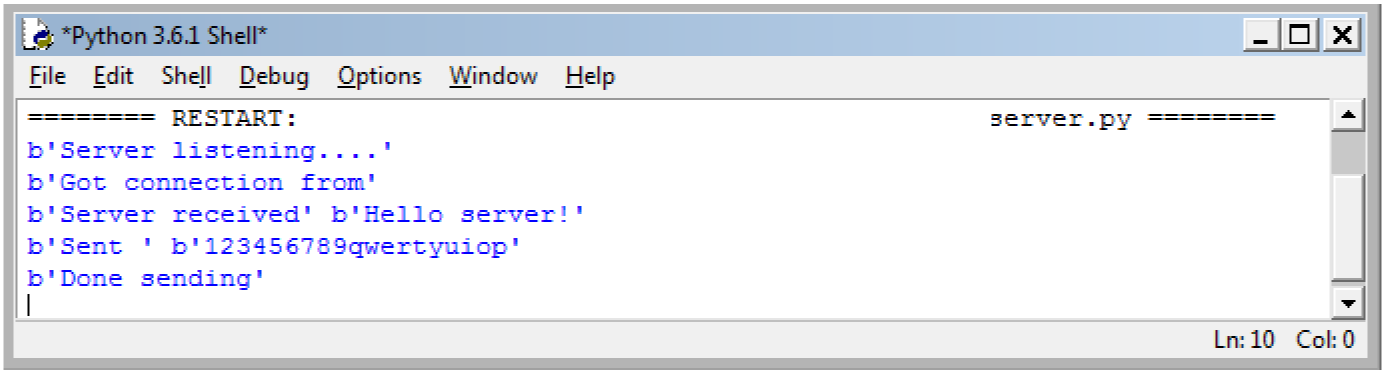
2. Client



```
# client.py

import socket                   # Import socket module

s = socket.socket()             # Create a socket object
host = socket.gethostname()     # Get local machine name
port = 60000                    # Reserve a port for your service.

s.connect((host, port))
s.send("Hello server!".encode())

with open('received_file.txt', 'wb') as f:
    print ('file opened'.encode())
    while True:
        print('receiving data...'.encode())
        data = s.recv(1024)
        print('data=%s'.encode(), (data))
        if not data:
            break
        # write data to a file
        f.write(data)

f.close()
print('Successfully get the file'.encode())
s.close()
print('connection closed'.encode())
```

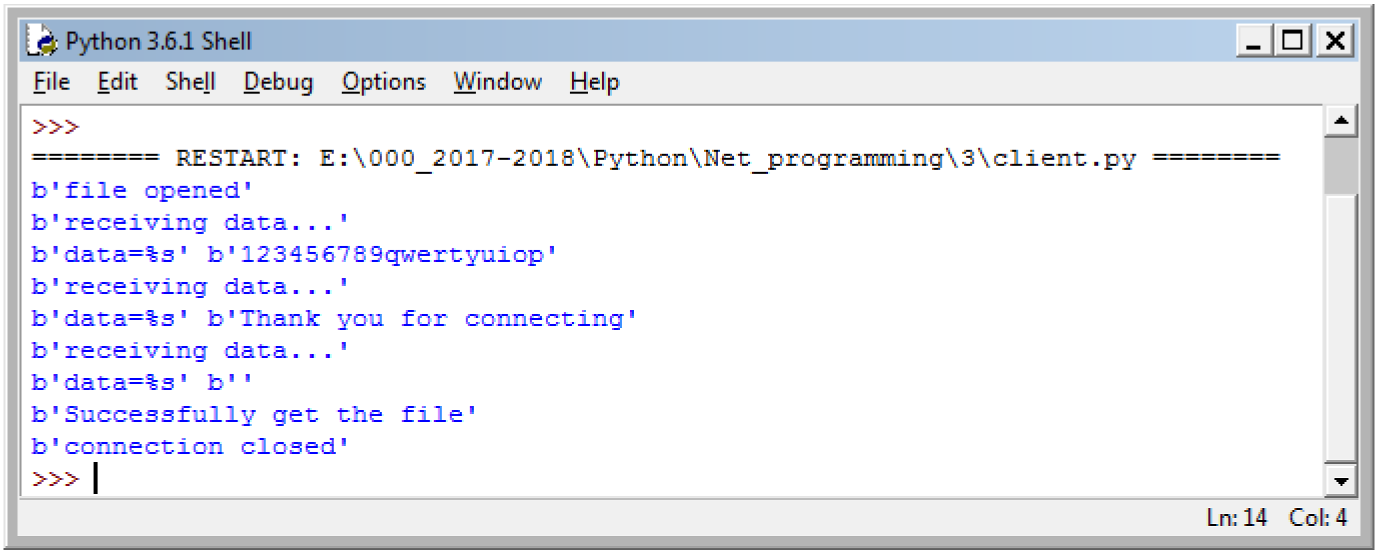
3. Results:

3.1. Output on a local server:



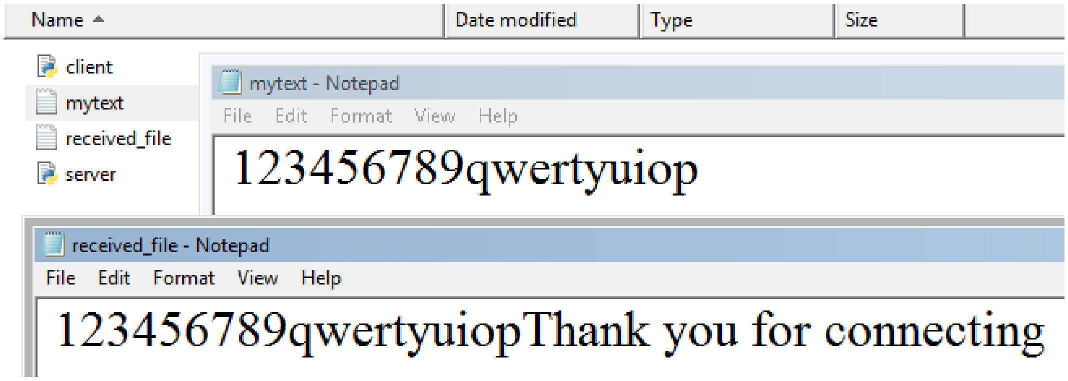
```
======== RESTART:                                 server.py ========
b'Server listening....'
b'Got connection from'
b'Server received' b'Hello server!'
b'Sent ' b'123456789qwertyuiop'
b'Done sending'
```

3.2. Output on a local client:



```
>>>
======== RESTART: E:\000_2017-2018\Python\Net_programming\3\client.py ========
b'file opened'
b'receiving data...'
b'data=%s' b'123456789qwertyuiop'
b'receiving data...'
b'data=%s' b'Thank you for connecting'
b'receiving data...'
b'data=%s' b''
b'Successfully get the file'
b'connection closed'
>>> 
```

3.3. File Transfer



```
123456789qwertyuiop
```

```
123456789qwertyuiopThank you for connecting
```

Obs: Studentii sunt invitati sa peronalizeze solutia prezentata mai sus si sa includa in raportul laboratorului o prezentare similara sectiunii “Results” de mai sus