# lab1 Web Server 编程作业

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## 1. Complete the skeleton code

#### 2. Run Code

Put an HTML file (e.g., HelloWorld.html) in the same directory that the server is in. Run the server program. Determine the IP address of the host that is running the server (e.g., 128.238.251.26). From another host, open a browser and provide the corresponding URL. For example:

http://localhost:9000/Web\_server.html

### 3. Require

You will hand in the complete server code along with the screen shots of your client browser

1. complete server code:

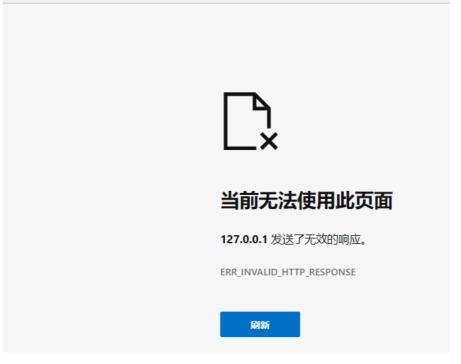
```
# import socket module
from socket import *
import sys # In order to terminate the program
serverSocket = socket(AF_INET, SOCK_STREAM)
# Prepare a sever socket
# Fill in start
HOST = ''
PORT = 9000
BUFSIZ = 1024
ADDRESS = (HOST, PORT)
serverSocket.bind(ADDRESS) # 绑定ADDRESS
serverSocket.listen(1)
# Fill in end
while True:
   # Establish the connection
   print('Ready to serve...')
   connectionSocket, addr = serverSocket.accept() # Fill in
   print('Connected by', addr)
   try:
       message = connectionSocket.recv(BUFSIZ) # Fill in start
#Fill in end
       print(message.split()[0], ':', message.split()[1])
       filename = message.split()[1]
       print(filename[1:])
       f = open(filename[1:],encoding='utf-8')
       outputdata = f.read() # Fill in start #Fill in end
       # Send one HTTP header line into socket
       # Fill in start
       data = 'HTTP/1.1 200 OK\r\n\r\n'
       connectionSocket.send(data.encode('utf-8'))
       # Fill in end
       # Send the content of the requested file to the client
       for i in range(0, len(outputdata)):
```

```
connectionSocket.send(outputdata[i].encode('utf-8'))
        connectionSocket.send("\r\n".encode('utf-8'))
        connectionSocket.close()
    except IOError:
       # Send response message for file not found
       # Fill in start
       data = '404 Not Found\r\n'
       print('No file')
       connectionSocket.send(data.encode('utf-8'))
       # Fill in end
       # Close client socket
       # Fill in start
       connectionSocket.close()
       # Fill in end
serverSocket.close()
sys.exit() # Terminate the program after sending the corresponding data
```

#### 2. output

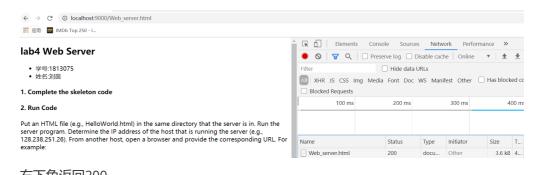
■ 失败

127.0.0.1:9000/hello.html



```
D:\software\python37\python.exe D:/pythonI
Ready to serve...
Connected by ('127.0.0.1', 62878)
b'GET' : b'/hello.html'
b'hello.html'
No file
Ready to serve...
```

成功



### 右下角返回200

```
? TCPServer ×
  Connected by ('127.0.0.1', 54594)
  b'Web server.html'
  Ready to serve...
 Connected by ('127.0.0.1', 54601)
  b'favicon.ico'
  No file
  Ready to serve...
```