Write a program which specifies at run time:

- a port number on which to listen for incoming connections.
- the name of a log file

The program listens on the TCP port specified. When a connection is made, the server sends back an HTTP 200 response and HTML text, which when shown in a browser, will display:

- "Your IP address is:" followed by the IP address of the machine that has connected. The IP address of the client may be obtained by using the getInetAddress method in the Socket class.
- It should then print the current date and time. In order to obtain the current date and time, you can use the java <u>Date class</u>.

The program then writes to the log file: the time, IP address of the client, and all of the HTTP headers sent by the client.

For example, when I try the program on my own computer, I see in the browser:

```
Your IP address is 129.32.95.12
The current time is: Mon Oct 17 15:17:22 EDT 2016
and then to the file, the program writes something like:
Mon Oct 17 15:17:22 EDT 2016
IP: 129.32.95.12
GET / HTTP/1.1
Host: localhost:9999
Connection: keep-alive
User-Agent: Mozilla/5.0 (X11; Linux x86 64)
AppleWebKit/535.1 (KHTML, like Gecko) Chrome/14.0.835.186
Safari/535.1
Accept:
text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q
=0.8
Accept-Encoding: gzip, deflate, sdch
Accept-Language: en-US, en; q=0.8
Accept-Charset: ISO-8859-1, utf-8; q=0.7, *; q=0.3
```

You should be able to test your program with a web browser to see that it's doing what it should.

Remember that your program is probably not going to be able to listen on port 80. To tell a web browser to connect to a web server on an alternate port, append a ":" and the port number to the URL. For example, if you're running your server on cis-linux2.temple.edu port 9999, in the browser's location window, you'd type: http://cis-linux2.temple.edu:9999 and you could always try testing the server on your own computer, with the client using the address: http://127.0.0.1:9999