Lab 4: Create a Dynamic Web Server

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

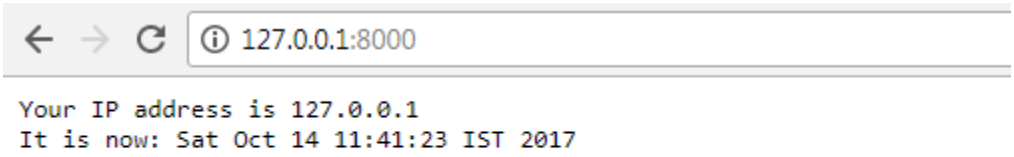
"Your IP address is:" followed by the IP address of the machine that has connected. The IP address of the client may be obtained by using the getInetAddress method in the Socket class.

```
ServerSocket sSocket = new ServerSocket(portNumber);

Socket socket = sSocket.accept();
```

It should then print the current date and time. In order to obtain the current date and time, you can use the java Date class.

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



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. You'll want to pick a relatively high port (i.e., something between 2000 and 65000).

On the client side, to tell the 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 the server on port 8000 on your home computer or workstation in the lab, and you're running a web browser on the same machine, you'd type in the browser's location window http://127.0.0.1:8000.