Project 1: Web Server

Student Name: _____   **Total Score:**   **/100**

Setup for testing

All testing will be on the Unix machine: `csil-cpu6.csil.sfu.ca` 如何连过去?

Use SSH to open two windows to that machine. Download and uncompress the test files.
The web site's root directory should be structured as follows:

```
% ls -R
.:
archive.zip   index.html   sfu.gif   sfu.jpg   sub
./sub:
sub.html
```

Run your web server in one of the SSH windows on any **port** (chosen randomly).

Run a web browser on your local Windows XP machine. 如何选择? 是需要一个System.in吗?

Test cases

Replace `servername` with `csil-cpu6.csil.sfu.ca` and `port` with the port number of your server.

1. Code quality: **/15 pts**

Good structure, sufficient comments, no compilation errors/warnings, readme file.
NullPointerException

2. Simple request: **/15 pts**

In the web browser, open `http://servername:port/index.html`.

2. Simple request in a subdirectory: **/15 pts**

In the web browser, open `http://servername:port/sub/sub.html`.

3. Object not found: **/15 pts**

 In the web browser, open `http://servername:port/sub/notexist.html`.
 Expected Behavior: The browser should display an error ("404") message.

4. Basic MIME type handling: **/15 pts**

 In the web browser, open `http://servername:port/sfu.jpg.` 文件总是自动下载，无法展示
 In the web browser, open `http://servername:port/sfu.gif`
 Expected Behavior: The browser should show the pictures.

5. Concurrent requests: 不会弄   **/25 pts**

This test case downloads 10 copies of archive.zip in **parallel**. The 10 copies will be stored
as: archive.zip.1, archive.zip.2, ..., archive.zip.10. After all downloads finish, all copies
should have the same size, same as the original archive.zip. To do this, we will use the
Unix command **wget.**

In the second SSH window, create a file named **test5** by issuing the command: `xemacs test5 &`.

Copy the following 10 lines in that file, after replacing `servername` and `port` with their correct values. Then save and close the file.

```
wget http://servername:port/archive.zip -b -O archive.zip.1 &
wget http://servername:port/archive.zip -b -O archive.zip.2 &
wget http://servername:port/archive.zip -b -O archive.zip.3 &
wget http://servername:port/archive.zip -b -O archive.zip.4 &
wget http://servername:port/archive.zip -b -O archive.zip.5 &
wget http://servername:port/archive.zip -b -O archive.zip.6 &
wget http://servername:port/archive.zip -b -O archive.zip.7 &
wget http://servername:port/archive.zip -b -O archive.zip.8 &
wget http://servername:port/archive.zip -b -O archive.zip.9 &
wget http://servername:port/archive.zip -b -O archive.zip.10 &
```

Issue the Unix command: `chmod a+x test5`
Then, run the test case by issuing: `./test5`