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CS372

1.)

a.) My programs are written in Python 3. All that is needed is to run 'python3 (program\_name).py'

b.)

```
TERMINAL
flip1 ~ 1001$ cd /nfs/stak/users/loebej ; /usr/bin/env /usr/bin/python3 /nfs/stak/users/loe
her 37642 -- /nfs/stak/users/loebej/CS372/Proj_1/connect_socket.py

HTTP/1.1 200 OK
Date: Tue, 26 Jan 2021 04:44:00 GMT
Server: Apache/2.4.6 (CentOS) OpenSSL/1.0.2k-fips PHP/7.4.14 mod_perl/2.0.11 Perl/v5.16.3
Last-Modified: Mon, 25 Jan 2021 06:59:02 GMT
ETag: "51-5b9b412ad1b5a"
Accept-Ranges: bytes
Content-Length: 81
Content-Type: text/html; charset=UTF-8

<html>
Congratulations! You've downloaded the first Wireshark lab file!
</html>

flip1 ~ 1002$ █
```

▼ TERMINAL

```
flip1 ~ 999$ /usr/bin/env /usr/bin/python3 /nfs/stak/users/loebefj/.vscode-server/extensions/ms-python.python-2021.1.502429796/pythonFiles/Lib/python/det
loebefj/CS372/Proj_1/LargeFile.py
```

```
HTTP/1.1 200 OK
Date: Tue, 26 Jan 2021 04:42:53 GMT
Server: Apache/2.4.6 (CentOS) OpenSSL/1.0.2k-fips PHP/7.4.14 mod_perl/2.0.11 Perl/v5.16.3
Last-Modified: Mon, 25 Jan 2021 06:59:02 GMT
ETag: "1194-5b9b412acf449"
Accept-Ranges: bytes
Content-Length: 4500
Content-Type: text/html; charset=UTF-8
```

```
<html><head>
<title>Historical Documents:THE BILL OF RIGHTS</title></head>
```

```
<body bgcolor="#ffffff" link="#330000" vlink="#666633">
<p><br>
</p>
<p></p><center><b>THE BILL OF RIGHTS</b><br>
<em>Amendments 1-10 of the Constitution</em>
</center>
```

```
<p>The Conventions of a number of the States having, at the time of adopting
the Constitution, expressed a desire, in order to prevent misconstruction
or abuse of its powers, that further declaratory and restrictive clauses
should be added, and as extending the ground of public confidence in the
Government will best insure the beneficent ends of its institution; </p><p> Resolved, by the Senate and House of Representatives of the United
States of America, in Congress assembled, two-thirds of both Houses concurring,
that the following articles be proposed to the Legislatures of the several
States, as amendments to the Constitution of the United States; all or any
of which articles, when ratified by three-fourths of the said Legislatures,
to be valid to all intents and purposes as part of the said Constitution,
namely: </p><p><a name="1"><strong><h3>Amendment I</h3></strong></a>
```

```
<p></p><p>Congress shall make no law respecting an establishment of
religion, or prohibiting the free exercise thereof; or
abridging the freedom of speech, or of the press; or the
right of the people peaceably to assemble, and to petition
the government for a redress of grievances.
```

```
</p><p><a name="2"><strong><h3>Amendment II</h3></strong></a>
```

```
<p></p><p>A well regulated militia, being necessary to the security
of a free state, the right of the people to keep and bear
arms, shall not be infringed.
```

```
</p><p><a name="3"><strong><h3>Amendment III</h3></strong></a>
```

```
<p></p><p>No soldier shall, in time of peace be quartered in any house,
without the consent of the owner, nor in time of war, but
in a manner to be prescribed by law.
```

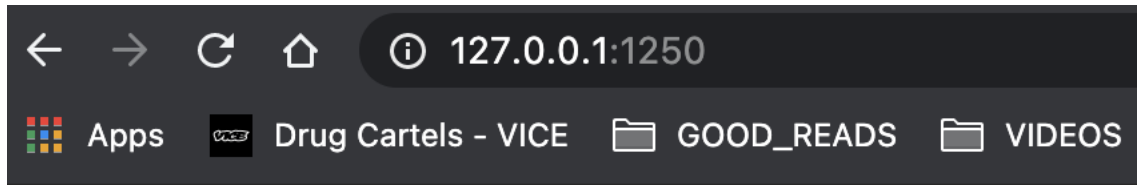
```
</p><p><a name="4"><strong><h3>Amendment IV</h3></strong></a>
```

```
<p></p><p>The right of the people to be secure in their persons, houses,
papers, and effects, against unreasonable searches and seizures,
shall not be violated, and no warrants shall issue, but upon
probable cause, supported by oath or affirmation, and
particularly describing the place to be searched, and the
persons or things to be seized.
```

```
flip1 ~/CS372/Proj_1 1009$ python3 http_server.py
RECEIVED: GET / HTTP/1.1
Host: 127.0.0.1:1250
Connection: keep-alive
Cache-Control: max-age=0
sec-ch-ua: "Google Chrome";v="87", " Not;A Brand";v="99", "Chromium";v="87"
sec-ch-ua-mobile: 70
Upgrade-Insecure-Requests: 1
User-Agent: Mozilla/5.0 (Macintosh; Intel Mac OS X 11_1_0) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/87.0.4280.141 Safari/537.36
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.9
Sec-Fetch-Site: none
Sec-Fetch-Mode: navigate
Sec-Fetch-User: ?1
Sec-Fetch-Dest: document
Accept-Encoding: gzip, deflate, br
Accept-Language: en-US,en;q=0.9,pt;q=0.8
dnt: 1
sec-gpc: 1
```

```
SENDING HTTP/1.1 200 OK
Content-Type: text/html; charset=UTF-8
```

```
<html>Congratulations! You've downloaded the first Wireshark lab file!</html>
```



**Congratulations! You've downloaded the first Wireshark lab file!**

3.) I struggled a bit at the beginning to find helpful information on getting this up and running, but kept reviewing the chapters mentioned in K&R and researching online, and found help regarding the socket api.