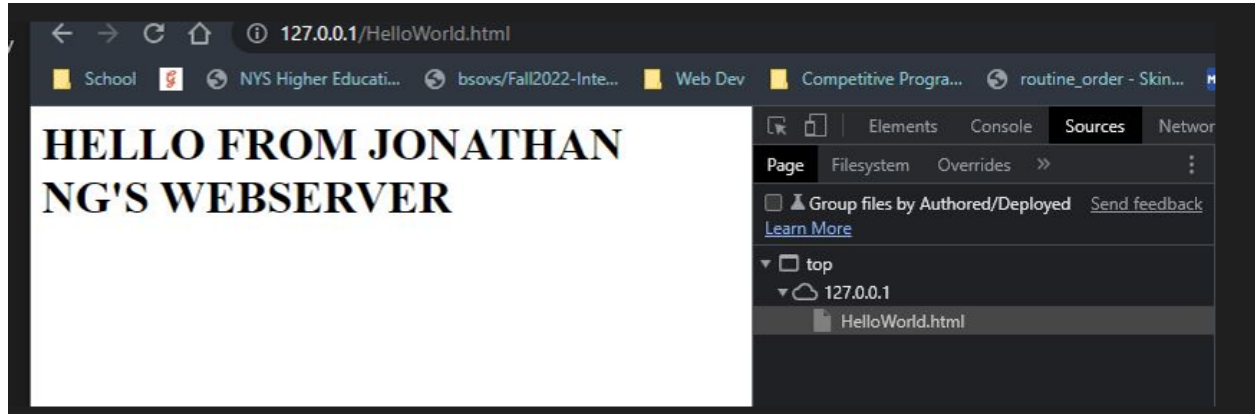


PART A

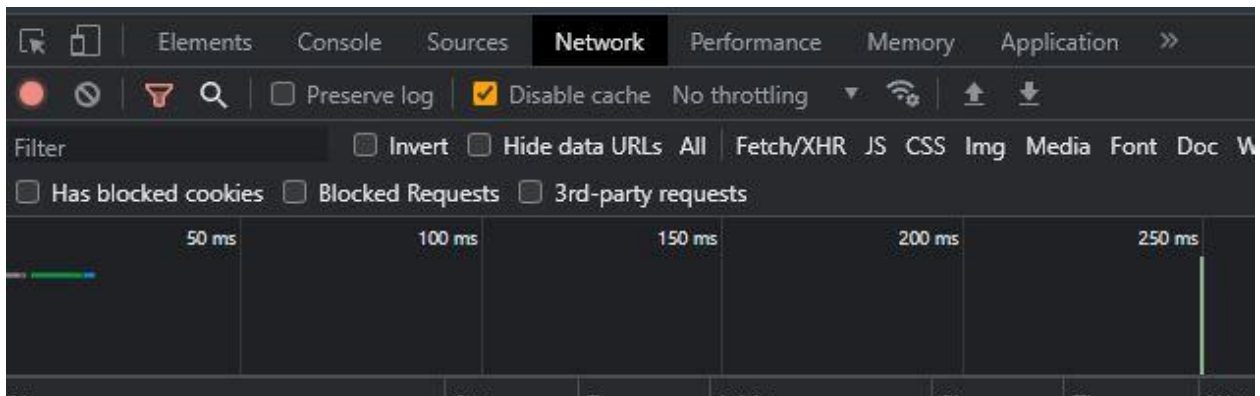
`sudo python3 webserver.py`



```
jwaibong@jwaibong-PC:~/cse310$ sudo python3 webserver.py
[sudo] password for jwaibong:
Currently in /home/jwaibong/cse310
Connected to ('127.0.0.1', 43744)
█
```

PART B

1) Disable Google Chrome cache in dev tools



2) sudo python3 proxyserver.py

3) Request <http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file5.html> from proxy

```
jwaibong@waibong-PC:~/cse310$ sudo python3 proxyserver.py
Client Requested Resource Not Cached: gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file5.html
Length 474: response received from gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file5.html
HTTP/1.1 200 OK
Date: Wed, 28 Sep 2022 21:55:41 GMT
Server: Apache/2.4.6 (CentOS) OpenSSL/1.0.2k-fips PHP/7.4.30 mod_perl/2.0.11 Perl/v5.16.3
Last-Modified: Wed, 28 Sep 2022 05:59:01 GMT
ETag: "1da-5e9b6751c4394"
Accept-Ranges: bytes
Content-Length: 474
Content-Type: text/html; charset=UTF-8

Client Requested Resource Not Cached: gaia.cs.umass.edu/wireshark-labs/banner.jpg
Length 20439: response received from gaia.cs.umass.edu/wireshark-labs/banner.jpg
HTTP/1.1 200 OK
Date: Wed, 28 Sep 2022 21:55:41 GMT
Server: Apache/2.4.6 (CentOS) OpenSSL/1.0.2k-fips PHP/7.4.30 mod_perl/2.0.11 Perl/v5.16.3
Last-Modified: Tue, 23 Sep 2003 03:24:33 GMT
ETag: "4fd7-3c7f6bcc45e40"
Accept-Ranges: bytes
Content-Length: 20439
Content-Type: image/jpeg
```

← → ↻ ↗ ⓘ 127.0.0.1:8888/http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file5.html 🔍 📌 ☆

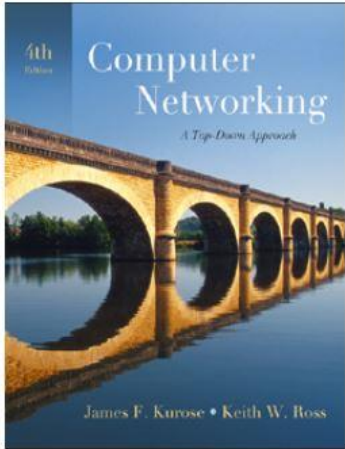
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Computer Networking

A Top-Down Approach Featuring the Internet

James F. Kurose • Keith W. Ross

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 - http://gaia.cs.umass.edu/wireshark-labs
 - HTTP-wireshark-file5.html
 - banner.jpg
 - manic.cs.umass.edu

4) Request <http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file4.html> from proxy

```
Client Requested Resource Not Cached: gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file4.html
Length 942: response received from gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file4.html
HTTP/1.1 200 OK
Date: Wed, 28 Sep 2022 21:56:23 GMT
Server: Apache/2.4.6 (CentOS) OpenSSL/1.0.2k-fips PHP/7.4.30 mod_perl/2.0.11 Perl/v5.16.3
Last-Modified: Wed, 28 Sep 2022 05:59:01 GMT
ETag: "3ae-5e9b6751c5b04"
Accept-Ranges: bytes
Content-Length: 942
Content-Type: text/html; charset=UTF-8
```

← → ↺ ⬆ 127.0.0.1:8888/http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file4.html 🔍 📁 ☆

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⏸ ⏮ ⏭ ⏪ ⏩ ⏹ ⏸

▼ Breakpoints

No breakpoints

▼ Call Stack

Not paused

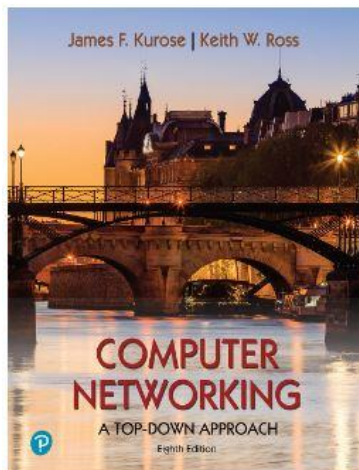
▶ XHR/fetch Breakpoints

▶ DOM Breakpoints

▶ Global Listeners



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And while we have your attention, you might want to take time to check out the available open resources for this book at http://gaia.cs.umass.edu/kurose_ross.

5) Request <http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file5.html> and receive it from proxy cache

```
Client Requested Resource Not Cached: gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file4.html
Length 942: response received from gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file4.html
HTTP/1.1 200 OK
Date: Wed, 28 Sep 2022 21:56:23 GMT
Server: Apache/2.4.6 (CentOS) OpenSSL/1.0.2k-fips PHP/7.4.30 mod_perl/2.0.11 Perl/v5.16.3
Last-Modified: Wed, 28 Sep 2022 05:59:01 GMT
ETag: "3ae-5e9b6751c5b04"
Accept-Ranges: bytes
Content-Length: 942
Content-Type: text/html; charset=UTF-8
```

```
Requested file found in cache: gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file5.html
Requested file found in cache: gaia.cs.umass.edu/wireshark-labs/banner.jpg
```

← → ↻ 🏠 ⓘ 127.0.0.1:8888/http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file5.html 🔍 📄 ☆

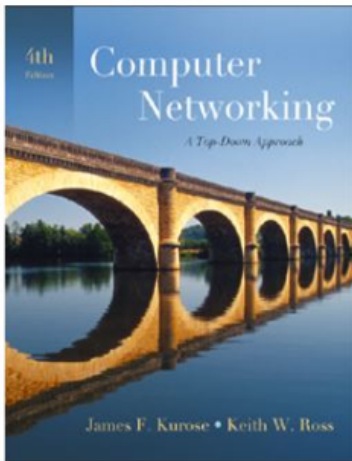
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Computer Networking

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📄 banner.jpg

📁 manic.cs.umass.edu

6) Request <http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file4.html> and receive it from proxy cache

```
Client Requested Resource Not Cached: gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file4.html
Length 942: response received from gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file4.html
HTTP/1.1 200 OK
Date: Wed, 28 Sep 2022 21:56:23 GMT
Server: Apache/2.4.6 (CentOS) OpenSSL/1.0.2k-fips PHP/7.4.30 mod_perl/2.0.11 Perl/v5.16.3
Last-Modified: Wed, 28 Sep 2022 05:59:01 GMT
ETag: "3ae-5e9b6751c5b04"
Accept-Ranges: bytes
Content-Length: 942
Content-Type: text/html; charset=UTF-8

Requested file found in cache: gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file5.html
Requested file found in cache: gaia.cs.umass.edu/wireshark-labs/banner.jpg
Requested file found in cache: gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file4.html
```



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