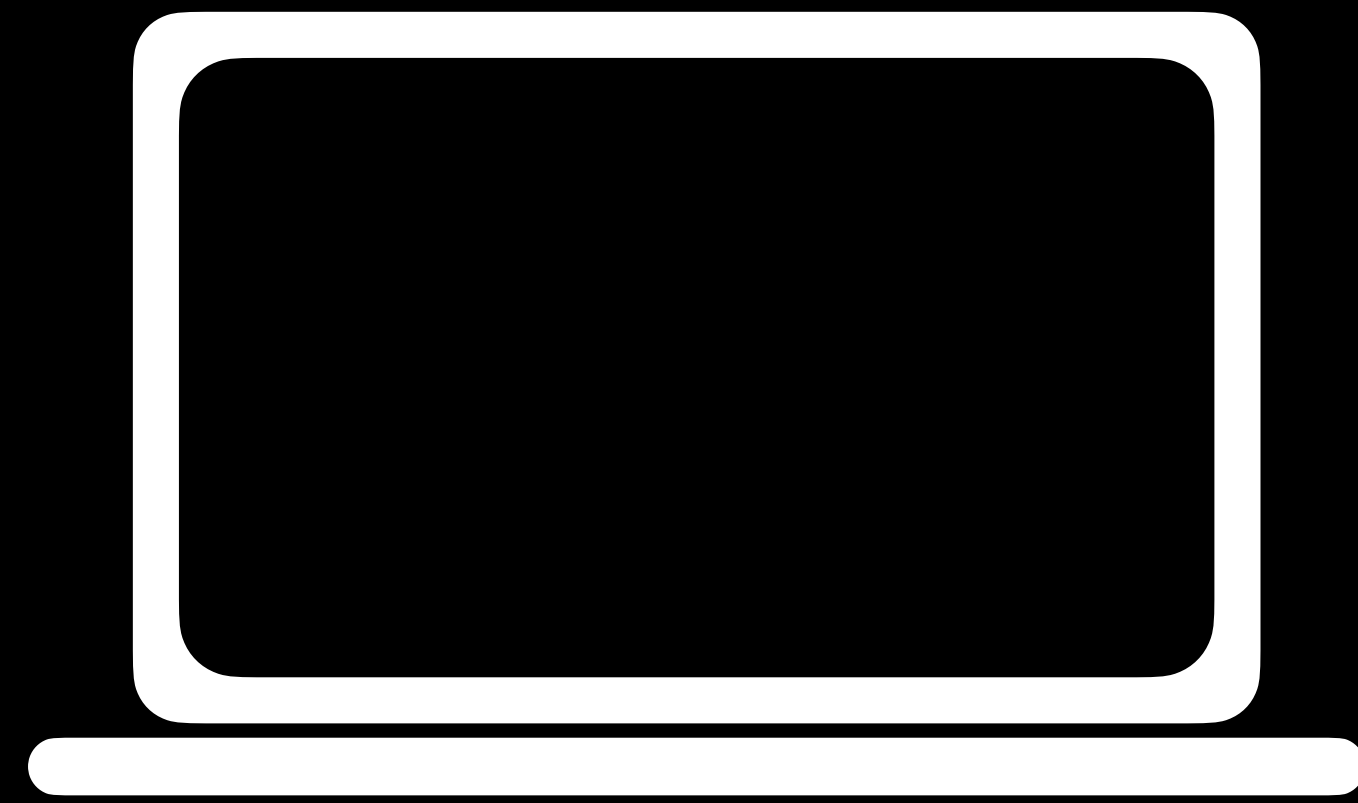
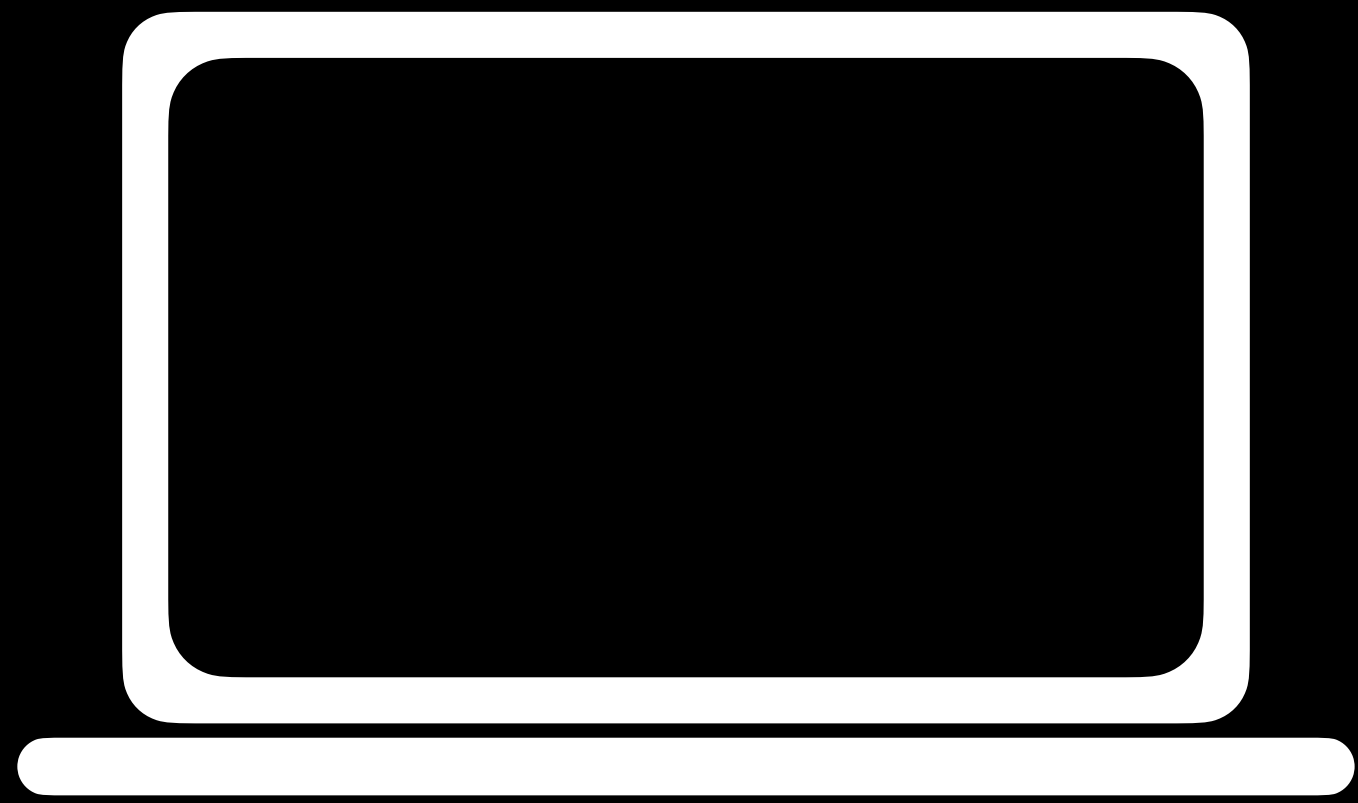
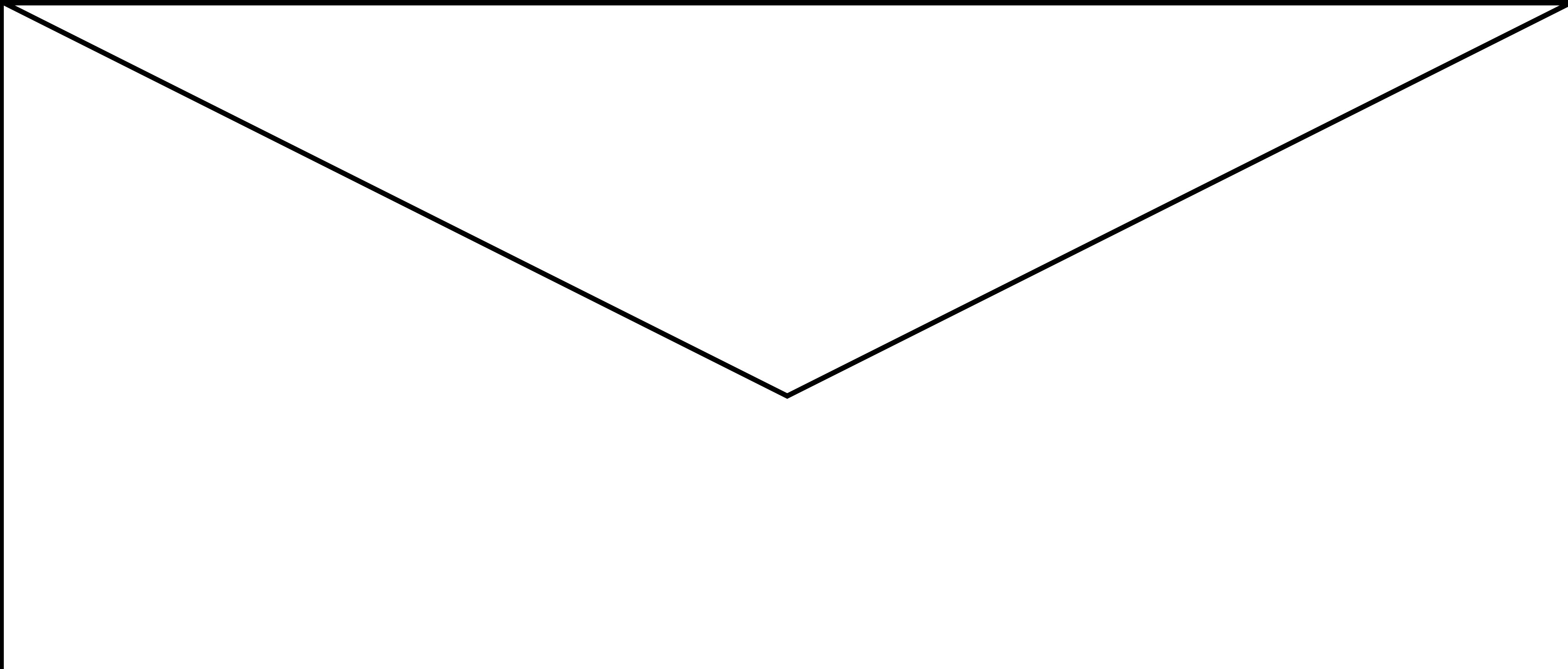


**HTTP**



TCP/IP



Sender

Recipient

# IP Addresses

#.#.#.#

5.6.7.8

1.2.3.4



#.#.#.#

#.#.#.#

0-255

0-255

0-255

0-255

#.#.#.#

8 bits

8 bits

8 bits

8 bits

#.#.#.#

32 bits

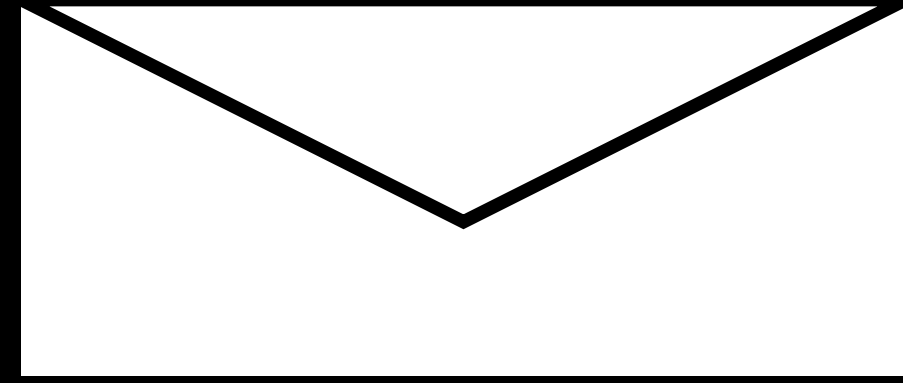
# IPv4

**32-bit addresses**

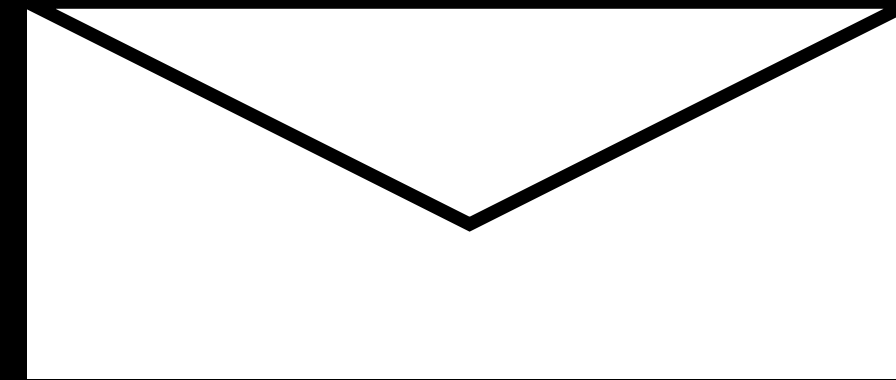
# IPv6

128-bit addresses

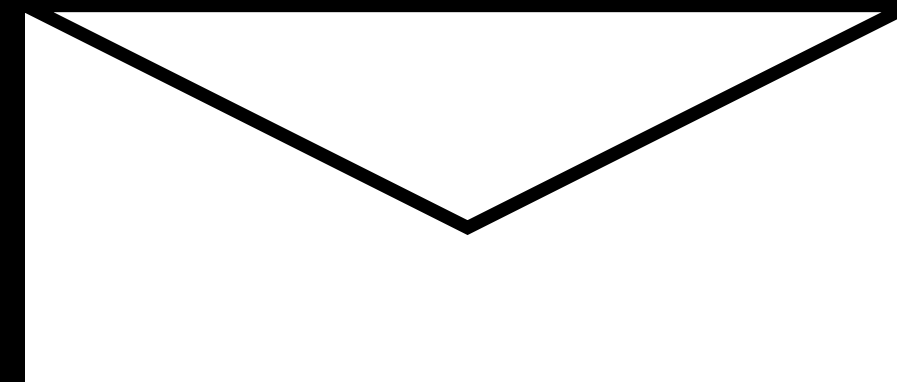
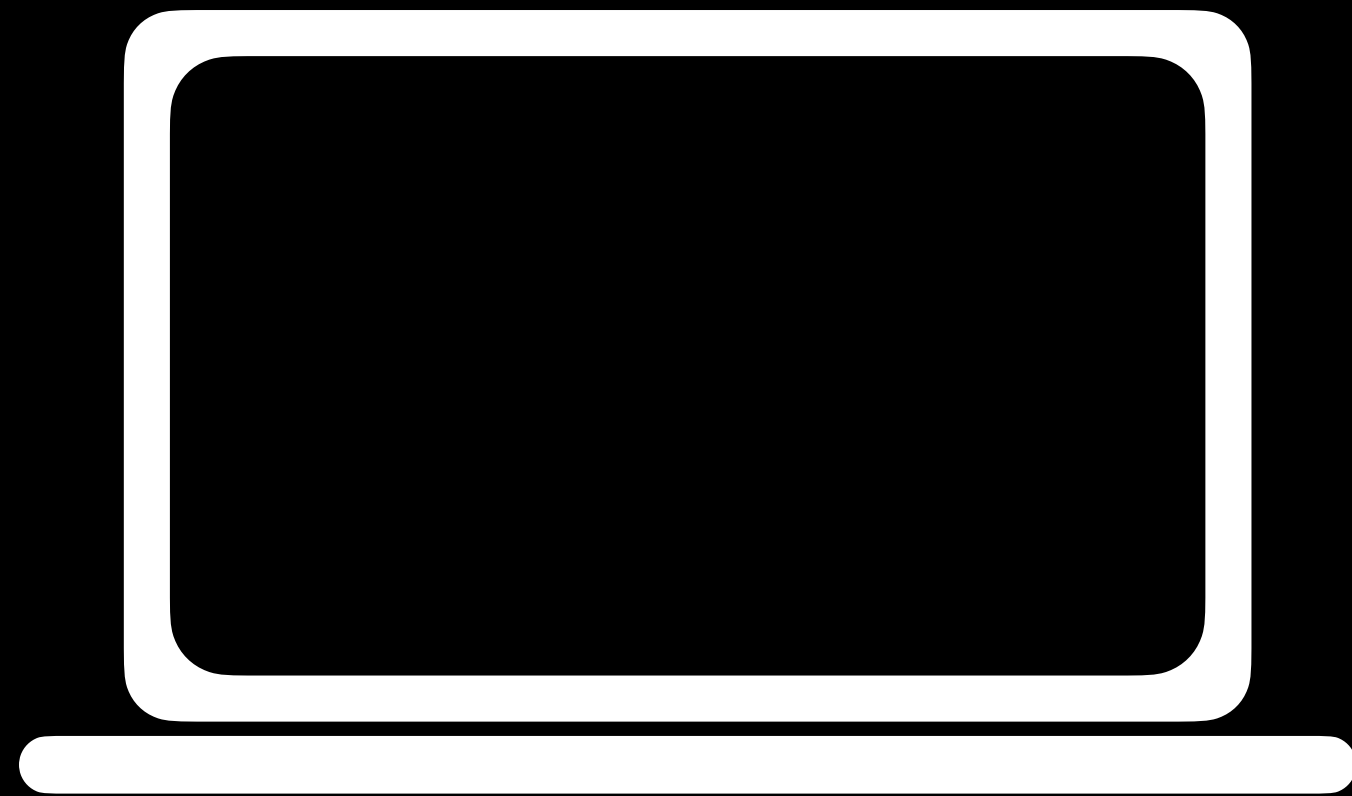




Email



Web Page



File Transfer



Ports

# Ports

Service	Port
FTP	21
SMTP	25
HTTP	80
...	...

5.6.7.8

1.2.3.4:80

<http://www.example.com>

URL

# DNS

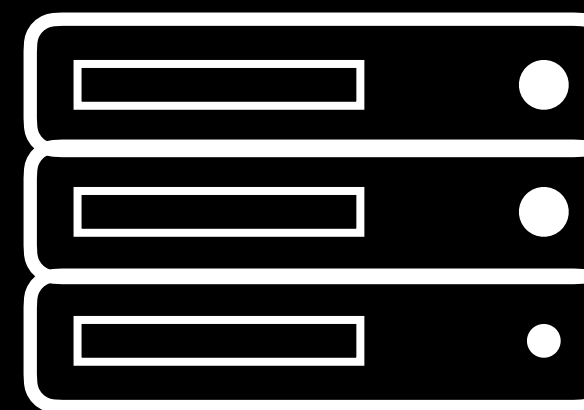
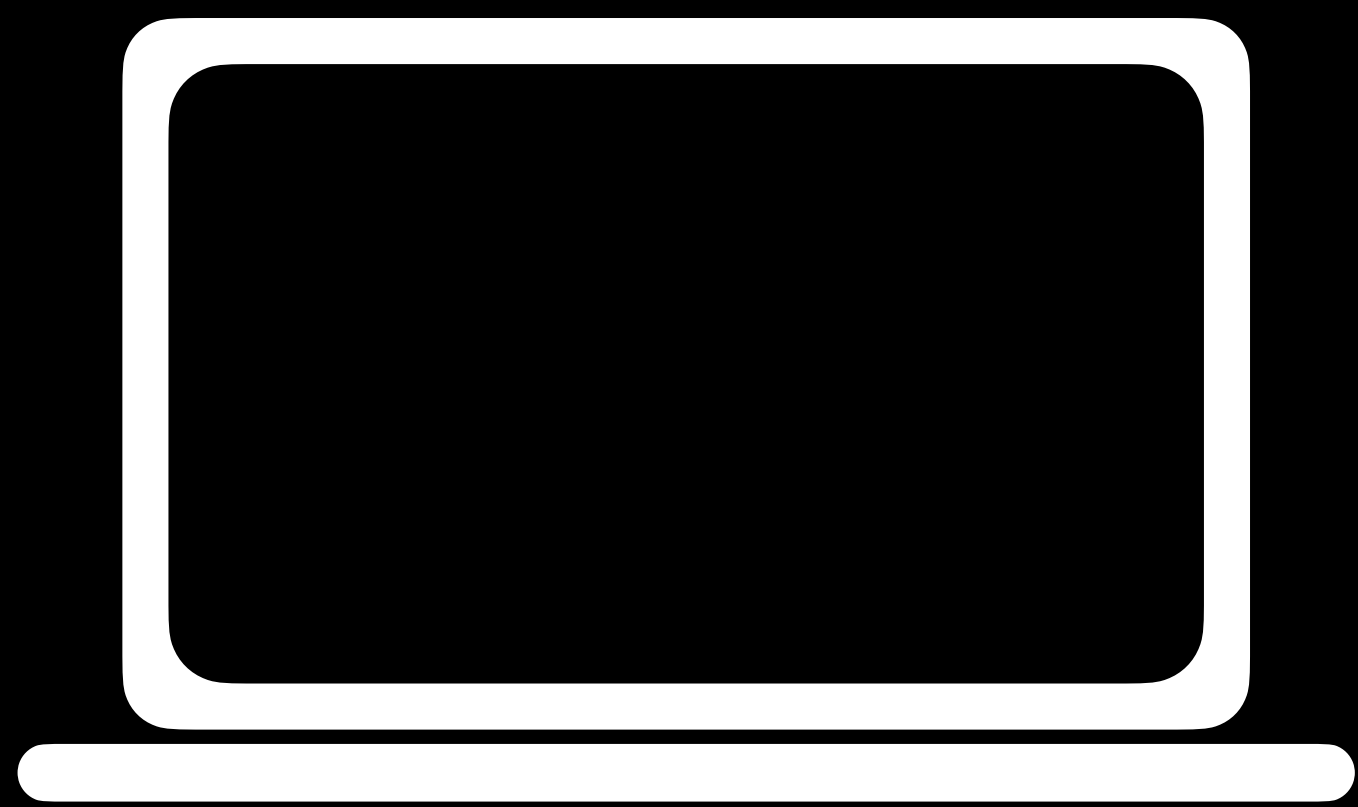
URL	IP Address
<b>google.com</b>	172.217.7.206
<b>harvard.edu</b>	23.22.75.102
<b>yale.edu</b>	104.16.243.4

<http://www.example.com>

<http://www.example.com>



**HTTP**



GET / HTTP/1.1

Host: www.example.com

...

GET / HTTP/2

Host: www.example.com

...

GET / HTTP/1.1

Host: www.example.com

...

HTTP/1.1 200 OK

Content-Type: text/html

...

# HTTP Status Codes

Status Code	Description
200	OK
301	Moved Permanently
403	Forbidden
404	Not Found
500	Internal Server Error

**HTTP**