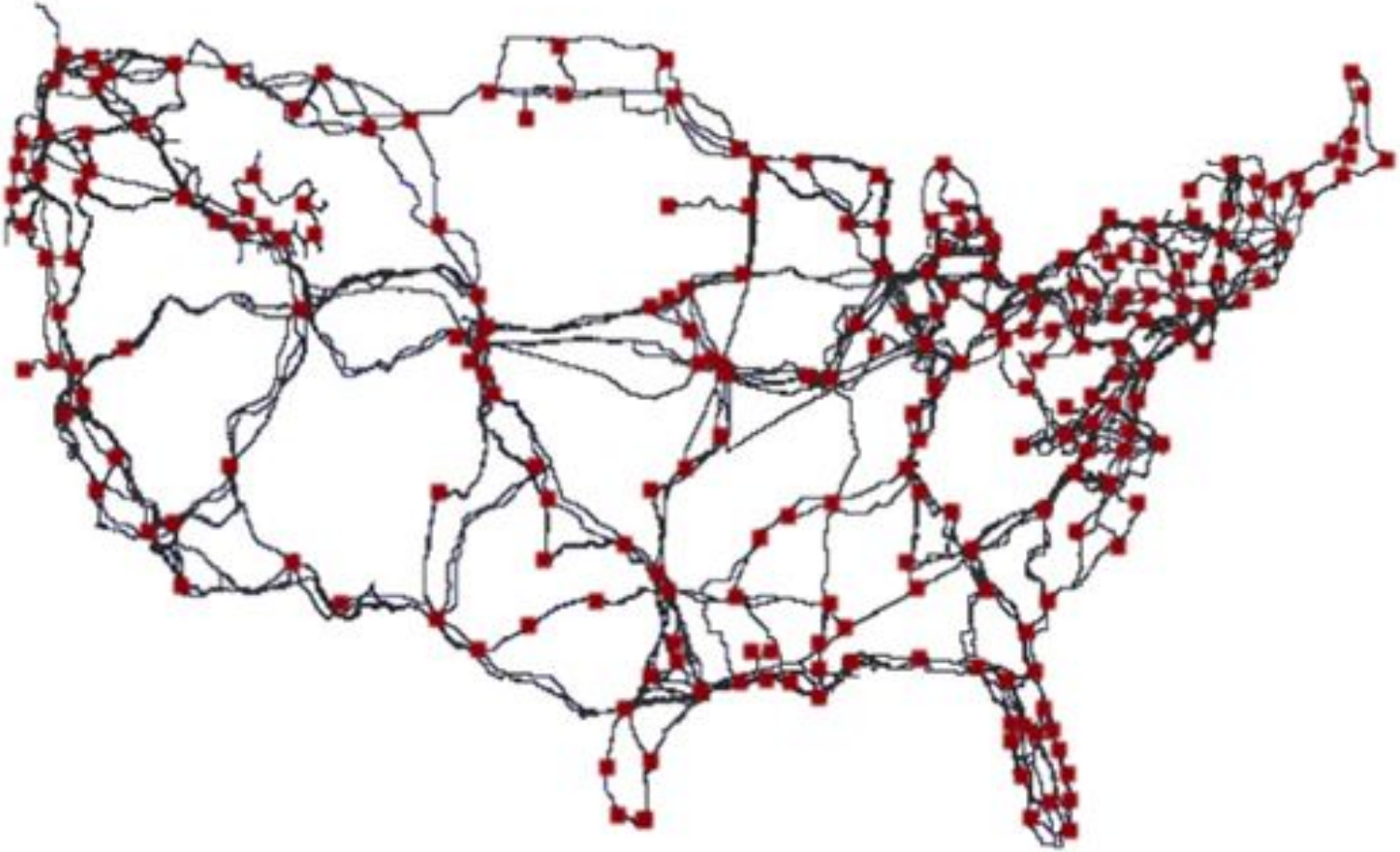
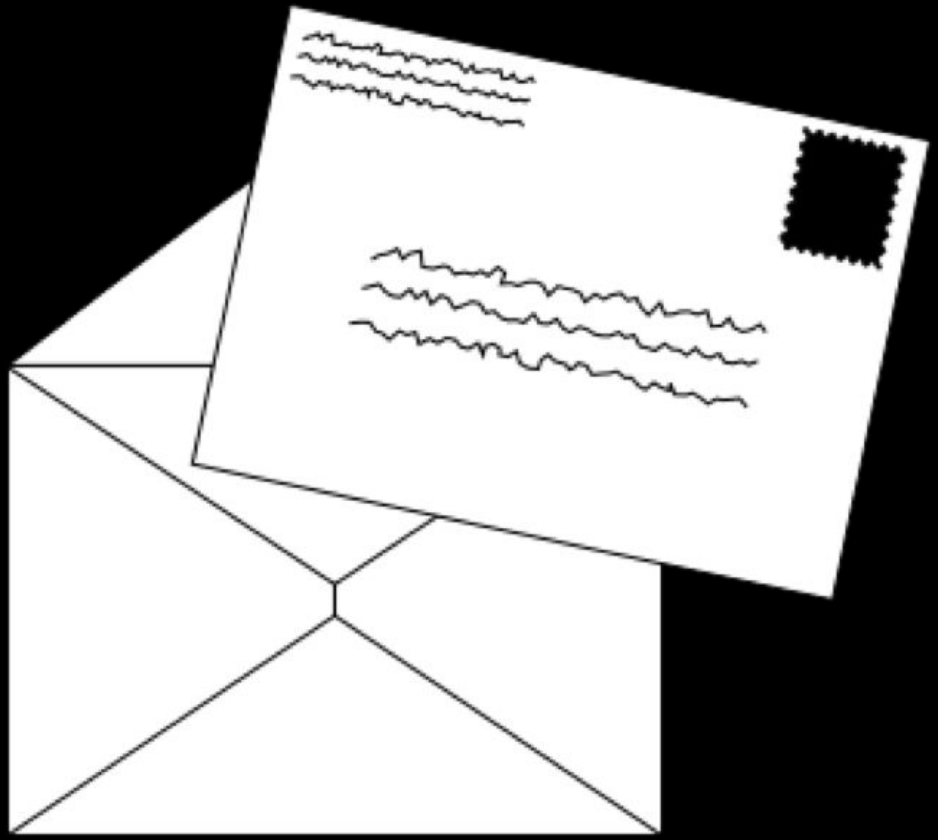
This is CS50

internet



# TCP/IP



clkr.com

IP

# DNS

# TCP

| | |
|---|---|
| 80 | HTTP |
| 443 | HTTPS |
| ... | |

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Guy E White
Dr Fiamko Betuafo N...
Alison Xin
Shreyas Iyer
Moshe Poliak
Yoel Hawa
Taylor Kruse
Helen Cho
Jonny Zhang
Josh Archibald
Ashley Zhuang
Caroline Abel
Sophie Edouard
Moni Radev
Jonathan Yuan
Albert Zhu
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# HTTP

GET
POST
...

https://www.example.com/

https://www.example.com/

https://www.example.com/

https://www.example.com/

https://www.example.com/

https://www.example.com/

https://www.example.com/index.html

# HTTP

```
GET / HTTP/1.1
Host: www.example.com
...
```

```
GET /index.html HTTP/1.1
Host: www.example.com
...
```

```
HTTP/1.1 200 OK
Content-Type: text/html
...
```

```
GET / HTTP/1.1
Host: www.harvard.edu
...
```

```
HTTP/1.1 301 Moved Permanently
Location: https://www.harvard.edu/
…
```

```
HTTP/1.1 404 Not Found
Content-Type: text/html
...
```

```
200 OK
301 Moved Permanently
302 Found
304 Not Modified
307 Temporary Redirect
401 Unauthorized
403 Forbidden
404 Not Found
418 I'm a Teapot
500 Internal Server Error
503 Service Unavailable
...
```

```
GET / HTTP/1.1
Host: safetyschool.org
...
```

```
GET / HTTP/1.1
Host: www.harvardsucks.org
...
```

```
GET /search?q=cats HTTP/1.1
Host: www.google.com
...
```

# HTML

tags

attributes

```
<!DOCTYPE html>

<html lang="en">
    <head>
        <title>
            hello, title
        </title>
    </head>
    <body>
        hello, body
    </body>
</html>
```

```
<!DOCTYPE html>

<html lang="en">
    <head>
        <title>
            hello, title
        </title>
    </head>
    <body>
        hello, body
    </body>
</html>
```

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<!DOCTYPE html>

<html lang="en">
    <head>
        <title>
            hello, title
        </title>
    </head>
    <body>
        hello, body
    </body>
</html>
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<!DOCTYPE html>

<html lang="en">
    <head>
        <title>
            hello, title
        </title>
    </head>
    <body>
        hello, body
    </body>
</html>
```

```
<!DOCTYPE html>

<html lang="en">
    <head>
        <title>
            hello, title
        </title>
    </head>
    <body>
        hello, body
    </body>
</html>
```

```
<!DOCTYPE html>

<html lang="en">
    <head>
        <title>
            hello, title
        </title>
    </head>
    <body>
        hello, body
    </body>
</html>
```

```
<!DOCTYPE html>

<html lang="en">
    <head>
        <title>
            hello, title
        </title>
    </head>
    <body>
        hello, body
    </body>
</html>
```

```
<!DOCTYPE html>

<html lang="en">
    <head>
        <title>
            hello, title
        </title>
    </head>
    <body>
        hello, body
    </body>
</html>
```

```
<!DOCTYPE html>

<html lang="en">
    <head>
        <title>
            hello, title
        </title>
    </head>
    <body>
        hello, body
    </body>
</html>
```

```
<!DOCTYPE html>

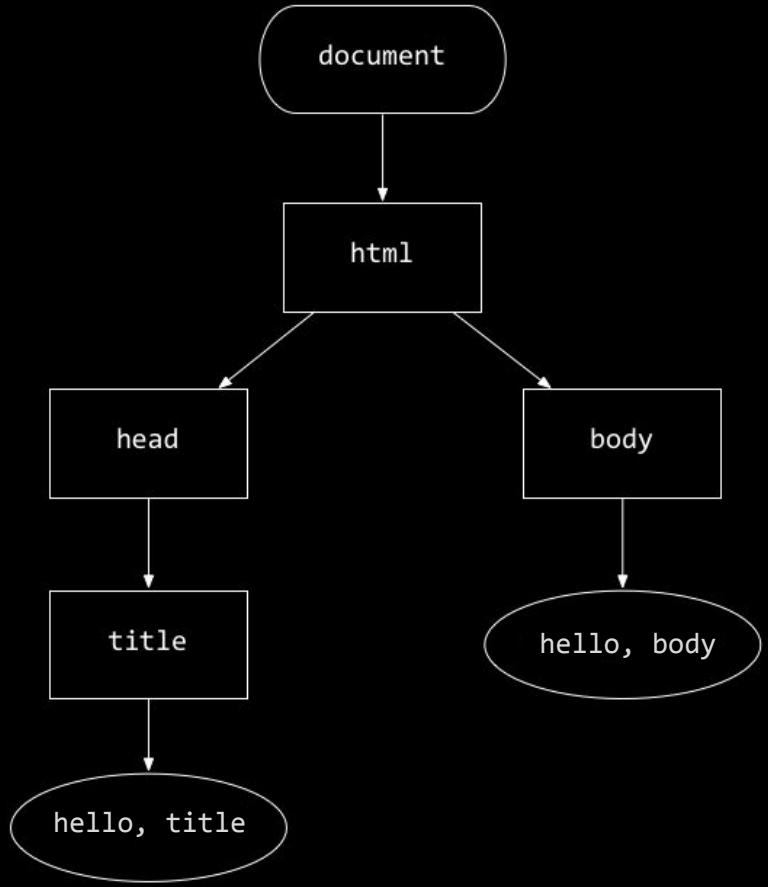
<html lang="en">
    <head>
        <title>
            hello, title
        </title>
    </head>
    <body>
        hello, body
    </body>
</html>
```

```
<!DOCTYPE html>

<html lang="en">
    <head>
        <title>
            hello, title
        </title>
    </head>
    <body>
        hello, body
    </body>
</html>
```

```
<!DOCTYPE html>

<html lang="en">
    <head>
        <title>
            hello, title
        </title>
    </head>
    <body>
        hello, body
    </body>
</html>
```



# CSS

properties

type selectors

class selectors

ID selectors

...

```
<!DOCTYPE html>

<html lang="en">
    <head>
        <title>
            hello, title
        </title>
    </head>
    <body>
        hello, body
    </body>
</html>
```

```
<!DOCTYPE html>

<html lang="en">
    <head>
        <style>

        </style>
        <title>
            hello, title
        </title>
    </head>
    <body>
        hello, body
    </body>
</html>
```

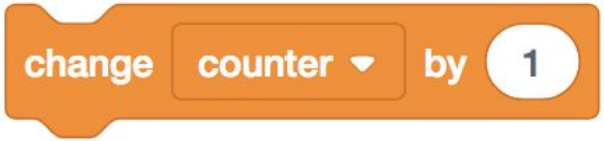
```
<!DOCTYPE html>

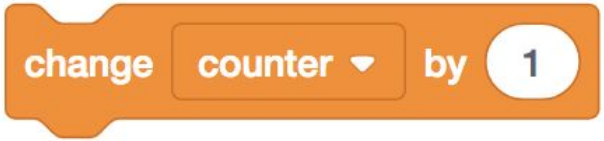
<html lang="en">
    <head>
        <link href="styles.css" rel="stylesheet">
        <title>
            hello, title
        </title>
    </head>
    <body>
        hello, body
    </body>
</html>
```

# JavaScript

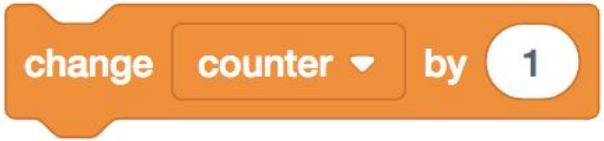
set
counter
to
0

```
let counter = 0;
```

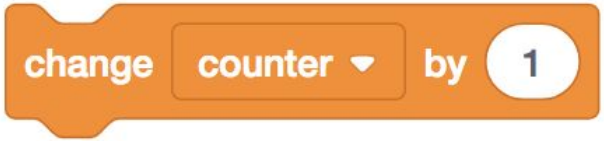

change
counter
by
1



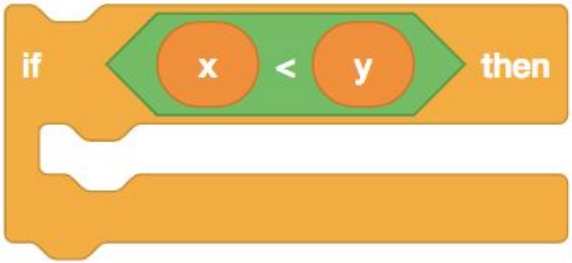

```
counter = counter + 1;
```

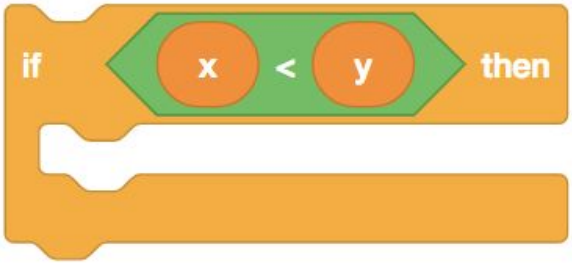



```
counter += 1;
```



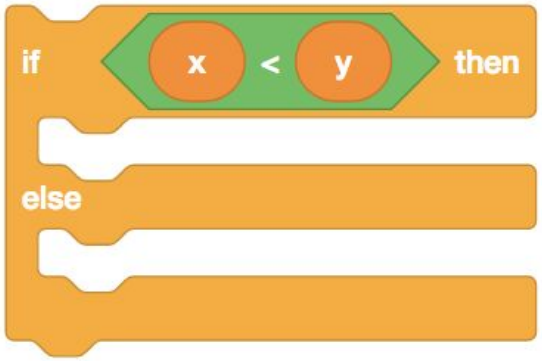

```
counter++;
```

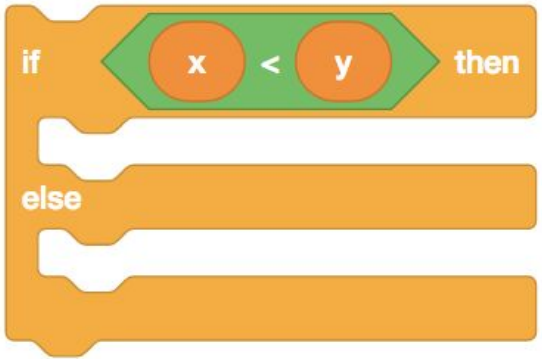

if
x
<
y
then




```
if (x < y)
{

}
```

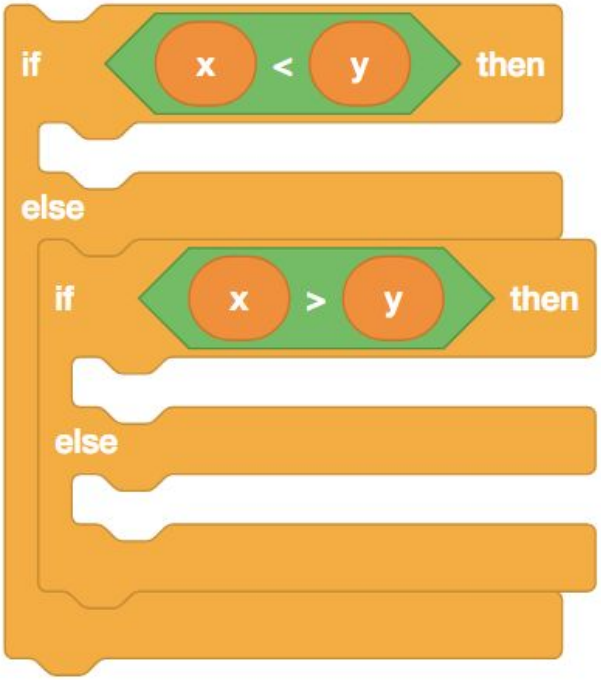

if
x
<
y
then
else

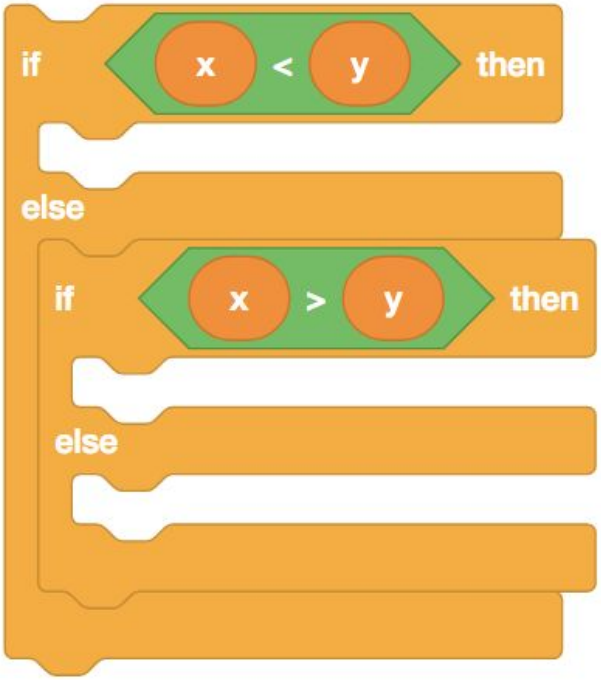



```
if (x < y)
{

}
else
{

}
```


if
x
<
y
then
else
if
x
>
y
then
else

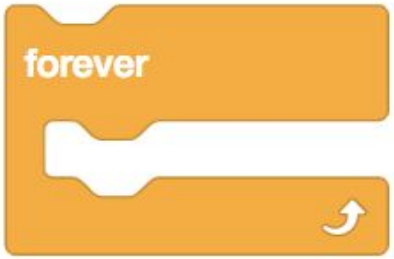


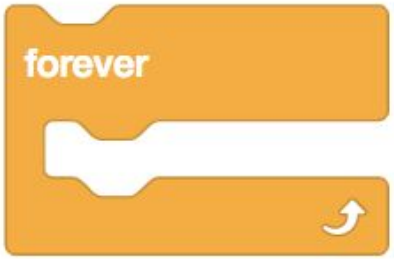

```
if (x < y)
{

}
else if (x > y)
{

}
else
{

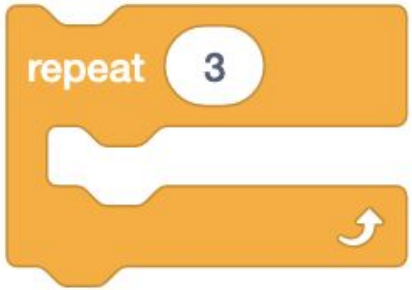
}
```


forever




```
while (true)
{

}
```

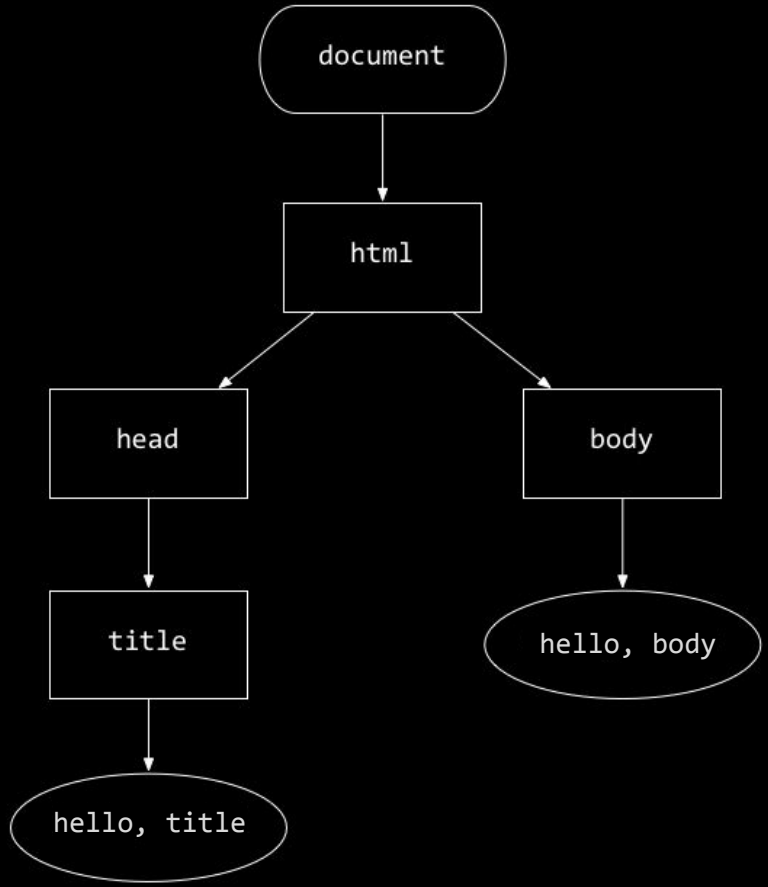



```
for (let i = 0; i < 3; i++)
{

}
```

```
<!DOCTYPE html>

<html lang="en">
    <head>
        <title>
            hello, title
        </title>
    </head>
    <body>
        hello, body
    </body>
</html>
```



```
<!DOCTYPE html>

<html lang="en">
    <head>
        <title>
            hello, title
        </title>
    </head>
    <body>
        hello, body
    </body>
</html>
```

```
<!DOCTYPE html>

<html lang="en">
    <head>
        <script>

        </script>
        <title>
            hello, title
        </title>
    </head>
    <body>
        hello, body
    </body>
</html>
```

```
<!DOCTYPE html>

<html lang="en">
    <head>
        <title>
            hello, title
        </title>
    </head>
    <body>
        hello, body
        <script>

        </script>
    </body>
</html>
```

```
<!DOCTYPE html>

<html lang="en">
    <head>
        <title>
            hello, title
        </title>
    </head>
    <body>
        hello, body
        <script src="scripts.js"></script>
    </body>
</html>
```

```
blur
change
click
drag
focus
keyup
load
mousedown
mouseover
mouseup
submit
touchmove
unload
...
```

This is CS50