

intro to JavaScript

class two

course adapted from:

Teaching Materials: <http://www.teaching-materials.org/javascript/>

Oz Girl Develop It: <http://cathylill.net/courses/js101/>

Girl Develop It: <http://www.girldevelopit.com/materials>



homework!



lifetime supply: html

In JS Bin, close the **Console** and click on **HTML & Output**. In the HTML window, paste this markup:

```
<!DOCTYPE html>
  <html>
    <head>
      <title>JAVASCRIPT 4EVA</title>
    </head>
    <body>
      <p>Check out my sweet webpage. Here's some
        stuff I learned how to do with JavaScript.
      <p>
    </body>
  </html>
```

lifetime supply: js

Write a function named `calculate` that figures out how much of your favorite food or drink you will consume in your lifetime. Some of the necessary steps include:

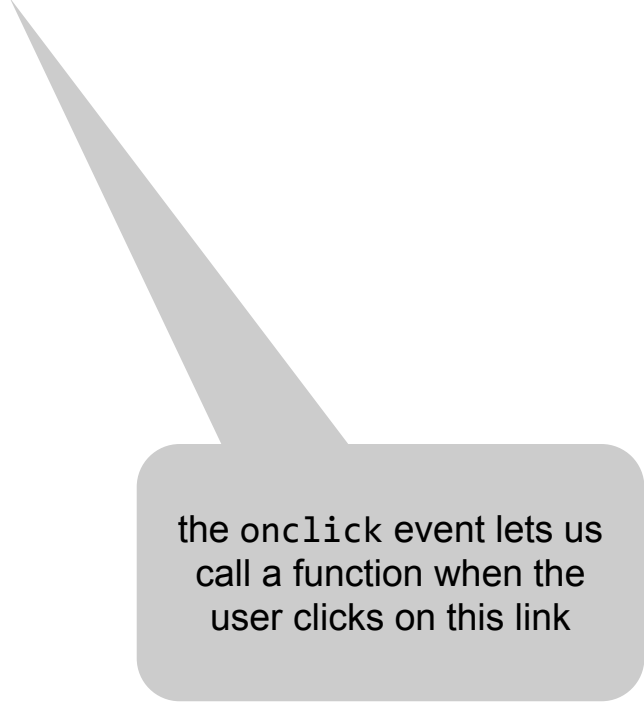
- Store your age in a variable
- Store your maximum age in a variable
- Store an estimated amount of snacks per day in a variable
- Calculate how many you would eat/drink for the rest of your life.
- Output the result in an alert (`alert("text");`) like so: "You will need NN to last you until the ripe old age of NN"

Note: Click on **Run with JS** in the **Output** window to initiate your JS.

run the function

To your HTML, add the following:

```
<button onclick="calculate()">Figure out your  
lifetime supply!</button>
```



the onclick event lets us
call a function when the
user clicks on this link

a little review

In the code below, identify a **statement**, **variable**, **expression**, **operator**, **function**, and **argument**.

```
function calculateTip(total) {  
    var tipPercent = 0.15;  
    return (total * tipPercent);  
}  
  
var billTotal = 10;  
var billTip = calculateTip(billTotal);  
var receipt = 'Total:' + billTotal + ' Tip:' +  
billTip;  
console.log(receipt);
```

Now, name the **data types** used and the **scope** of the variables.

linking HTML & JS

JS Bin automatically links our HTML & JS, but when building our own sites, we'll need to tell the browser where our script lives.

We do that with the script tag:

```
<script>write your script here</script>
```

linking HTML & JS cont.

There are a couple of ways to link your HTML & JS.

You can write JS right into your HTML:

```
<script>
  function calculate(){
    var age = 33;
    var maxAge = 111;
    var cupsPerDay = 3;
    var cupsNeeded = (maxAge - age) * 365 * cupsPerDay;
    alert('You will need ' + cupsNeeded + ' to last you
    until the ripe old age of ' + maxAge);
  }
</script>
```


linking HTML & JS cont.

Or you can write your script(s) in a separate file and link that file to your HTML (like an external CSS stylesheet):

```
<script src="js1.js"></script>
```

if statements

if tells JS which statements to execute, depending on a certain condition:

```
if (condition here) {  
    //statement to execute  
}
```

```
var cupsOfCoffee = 4;  
if (cupsOfCoffee > 3) {  
    console.log("You've had too much  
coffee!");  
}
```

comparisons

- === Equality
- !== Inequality
- > Greater than
- >= Greater than or equal to
- < Less than
- <= Less than or equal to

Don't confuse = with == or ===

assigns a
value

compares a
value

compares
value & type

logical operators

&& **AND**

|| **OR**

! **NOT**

evaluation

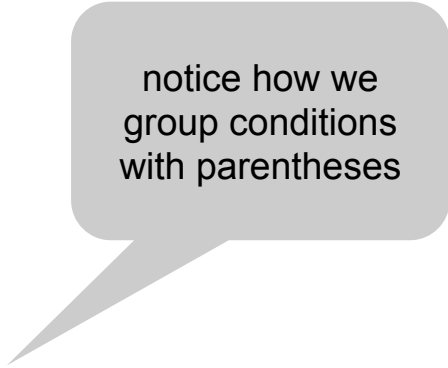
JS reads from left to right and stops as soon as it has an answer.

`(false && anything) => false`

`(true || anything) => true`

let's try it out

```
var cupsCoffee = 4;
var sleep = 6;
var babyCrying = false;
if ((cupsCoffee<=0 && sleep<8) || babyCrying===true) {
    console.log("I may not be in the best mood.");
}
```



notice how we
group conditions
with parentheses

truthy & falsey

If you don't use comparison or logical operator, JS treats it like you're asking if a value is truthy.

```
var coffeeRules = true;
if (coffeeRules) {
  console.log('Yay coffee!');
}
```

Try false, an empty string, the number 0, an undefined value, or null. What happens?

Why “truthy”? Try changing the value to a number or a text string.

if / else

If our “if” isn’t true, we can specify an alternative action.

```
var cupsOfCoffee = prompt('How many cups of coffee  
have you had today?');
```

asks user for input

```
if (cupsOfCoffee > 4) {  
    alert('Slow down there, champ!');  
} else {  
    alert('You need another cup of coffee!');  
}
```

makes pop-up

if / else if / else

If you have multiple exclusive conditions to check:

```
var cupsOfCoffee = prompt('How many cups of coffee have you had today?');
```

```
if (cupsOfCoffee > 4) {  
    alert('Slow down there, champ!');  
} else if (//put something here){  
    //and here  
} else {  
    alert('You need another cup of coffee!');  
}
```

homework!



hello world translator

Write a function named `helloWorld` that:

- takes 1 argument, a language code (e.g. "es", "de", "en")
- returns "Hello, World" for the given language in an alert, for at least 3 languages (try using [Google Translate](#)). It should default to returning English.

Prompt the user for a language code and then call the function using the user's input.

BONUS: alert an error message if the user has entered something that isn't one of your language codes.