**SPIKE SOLUTIONS**

A spike solution, or spike, is a technical investigation. It's a small experiment to research the answer to a problem. For example, a programmer might not know whether JavaScript throws an exception on arithmetic overflow. A quick ten-minute spike will answer the question. A spike solution is a very simple program to explore potential solutions. Build the spike to only addresses the problem under examination and ignore all other concerns. Such stepping outside the difficulties at hand often led us to simpler and more compelling solutions. Kent dubbed this a Spike.

Create a Spike Solution on <http://www.extremeprogramming.org/rules/spike.html>

Here are few examples:

[Spike Solutions](http://www.extremeprogramming.org/rules/spike.html)

1. convert a string to a number
2. insert an item in an array using .splice
3. save to localStorage and read from localStorage
4. remove an item from an array using .splice
5. **Convert a string to a number**

There are two ways to convert to number in JavaScript.

1. Number() function

* If the argument cannot be converted into a number, it returns [NaN](https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/NaN" \o "The global NaN property is a value representing Not-A-Number.).
* In a non-constructor context (i.e., without the [new](https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Operators/new) operator), Number can be used to perform a type conversion.

e.g.

Number('123') // 123

Number('12.3') // 12.3

Number('') // 0

Number('0x11') // 17

Number('0b11') // 3

Number('0o11') // 9

Number('foo') // NaN

Number('100a') // NaN

2. parseFloat() function

* The parseFloat() function parses a string and returns a floating point number.
* This function determines if the first character in the specified string is a number. If it is, it parses the string until it reaches the end of the number, and returns the number as a number, not as a string.

e.g.

##### **returning a number**

The following examples all return **3.14**

parseFloat('3.14');

parseFloat('314e-2');

parseFloat('0.0314E+2');

parseFloat('3.14more non-digit characters');

##### **returning NaN**

The following example returns NaN

parseFloat('FF2');

1. **insert an item in an array using .splice**

<https://www.w3schools.com/jsref/jsref_splice.asp>

Takes User Input and Inserts it into an array using splice(index,itemtoremove,itemstoadd)

We were inserting data at index 0 and not removing any items (0,0,data)

Then outputs the array onto screen

Splice should be used when you need to switch out something in an array. For just inserting to the end of an array you should use .push

1. **Storing to and retrieving from localstorage**



1. **remove an item from an array using .splice**

Do it in class.