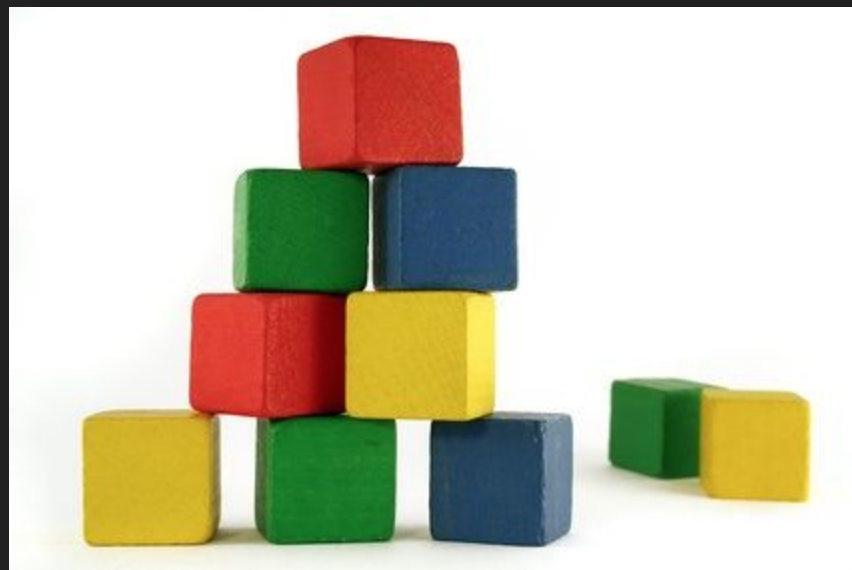


# JavaScript

Part 3





# Jack the Llama



# Keep a log of numbers

- 2, 3, 5, 7, 11
- “2 3 5 7 11”
- Use arrays!

# Try it out!

```
console.log(listOfNumbers[3]);
```

```
console.log(listOfNumbers[1]);
```

```
console.log(listOfNumbers[300-300]);
```

# Properties

- `Math.max`
- `myStr.length`

`something.property`    vs    `something[property]`

# Methods

- We don't only have properties.
- We have methods!
- `myStr.toUpperCase()`

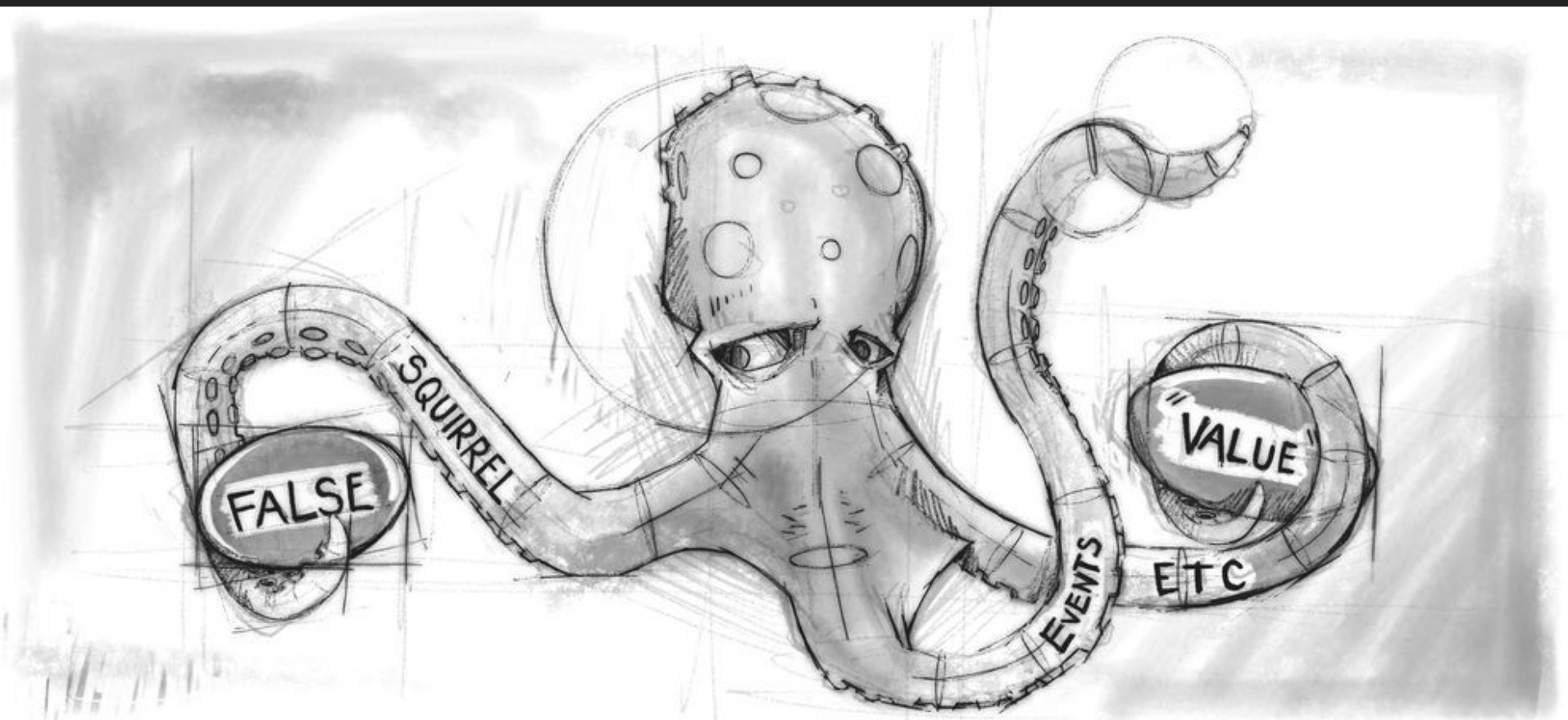


```
var pizzas = [];  
pizzas.push('Pepperoni');  
pizzas.push('Cheese', 'More Cheese');  
console.log(pizzas);  
console.log(pizzas.join(" "));  
console.log(pizzas.pop());  
console.log(pizzas);
```

# Training Program: <https://www.freecodecamp.com>

Day 1: Store Multiple Values up to Shopping List.

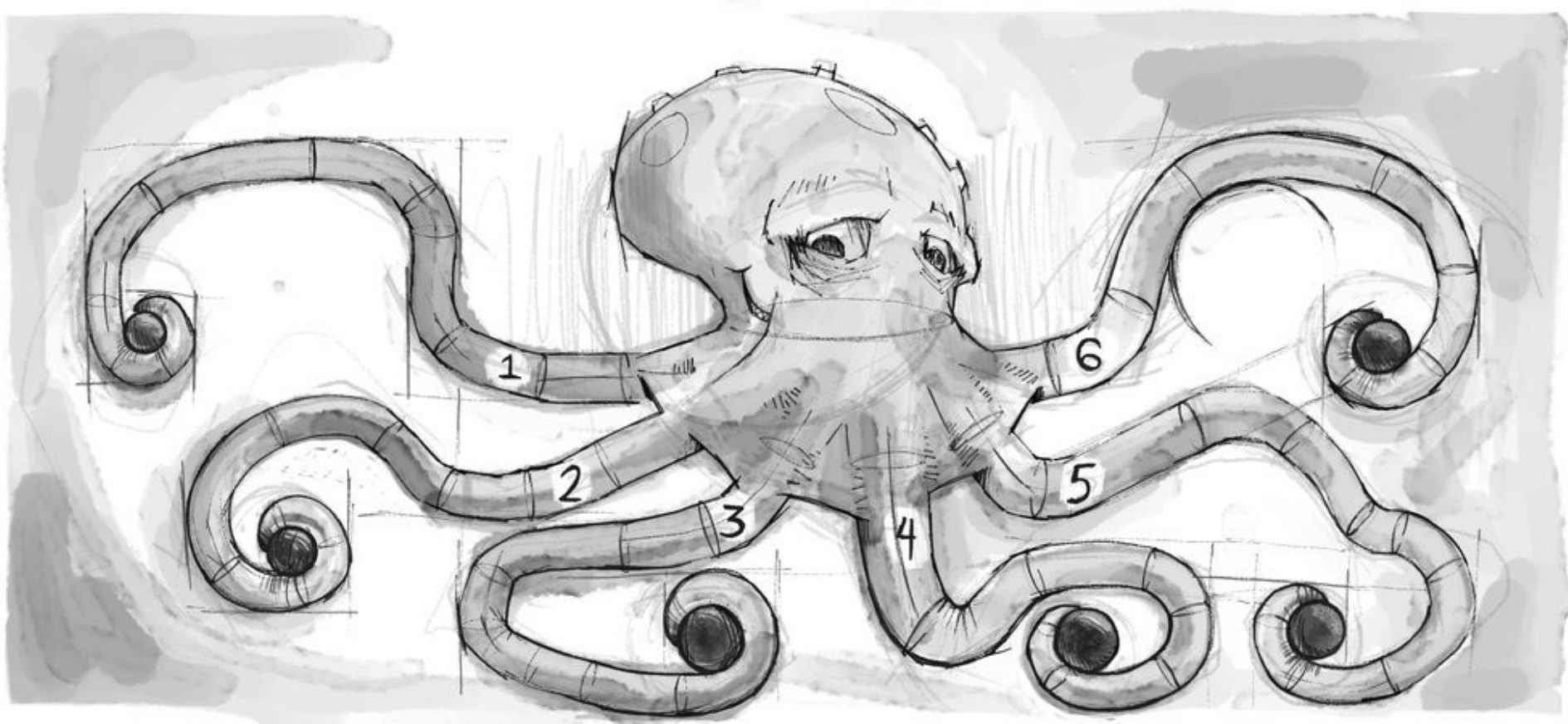




# Deleting properties

```
var anObject = {left: 1, right: 2};  
console.log(anObject.left);  
delete anObject.left;  
console.log(anObject.left);  
console.log("left" in anObject);  
console.log("right" in anObject);
```

Arrays are objects



```
var journal = [  
  {  
    events: ['work', 'pizza', 'running', 'magic beans'],  
    llama: false  
  },  
  {  
    events: ['work', 'hamburguer', 'eat grass', 'magic potatoes'],  
    llama: false  
  },  
  {  
    events: ['weekend', 'mushrooms', 'running', 'Flash'],  
    llama: true  
  },  
]
```

Jack is not happy



Correlation or not?

$$\varphi = \frac{n_{11}n_{00} - n_{10}n_{01}}{\sqrt{n_{1.}n_{0.}n_{.1}n_{.0}}}$$

# Explaining the formula

$n_{11}$ : llama and pizza

$n_{00}$ : no llama and no pizza

$n_{10}$ : llama but no pizza

$n_{01}$ : no llama but pizza

$n_{1*}$ : How many times Jack was a llama

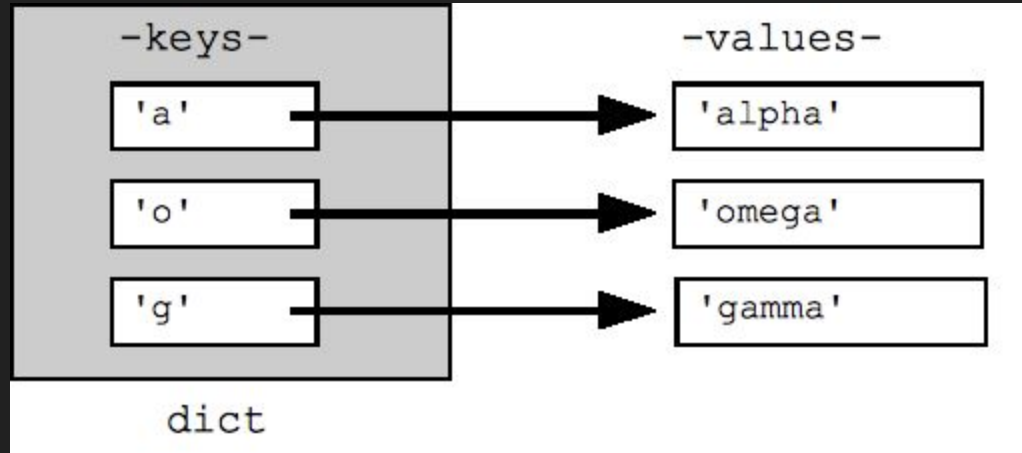
$n_{0*}$ : How many times Jack was not a llama

$$\varphi = \frac{n_{11}n_{00} - n_{10}n_{01}}{\sqrt{n_{1.}n_{0.}n_{.1}n_{.0}}}$$

# What do we need to program?

- phi
- Has the event?
- Create the table
  - Remember: NN, NY, YN, YY

# Objects as maps



# Training Program: <https://www.freecodecamp.com>

Day 1: Build JavaScript objects up to Record Collection

Day 2: For Loops up to Profile Lookup

Day 3: Generate Random Fractions up to Invert Regular Expression Matches