



Web Developer Bootcamp

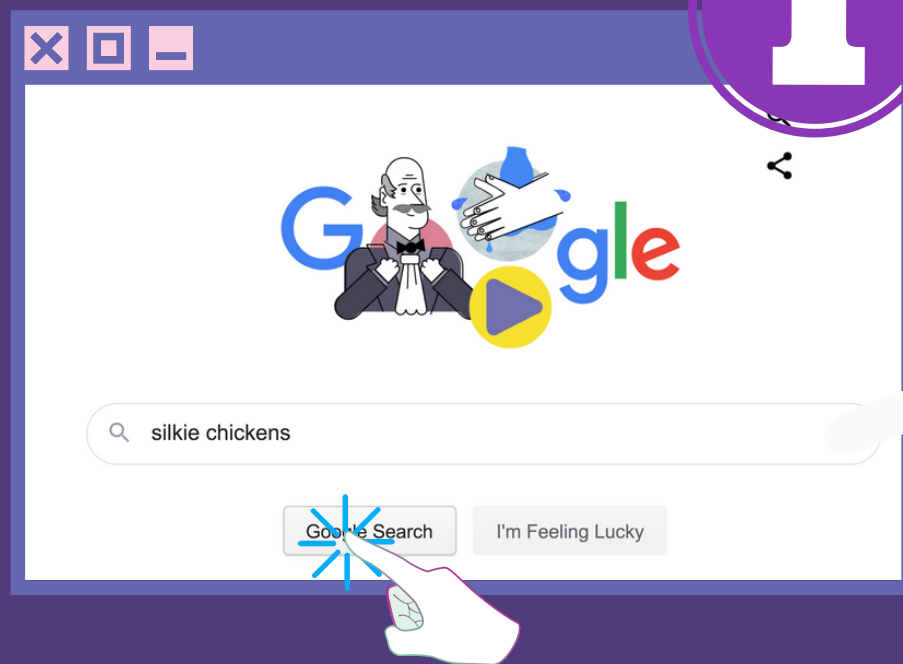
# JavaScript Basics

VALUES & VARIABLES



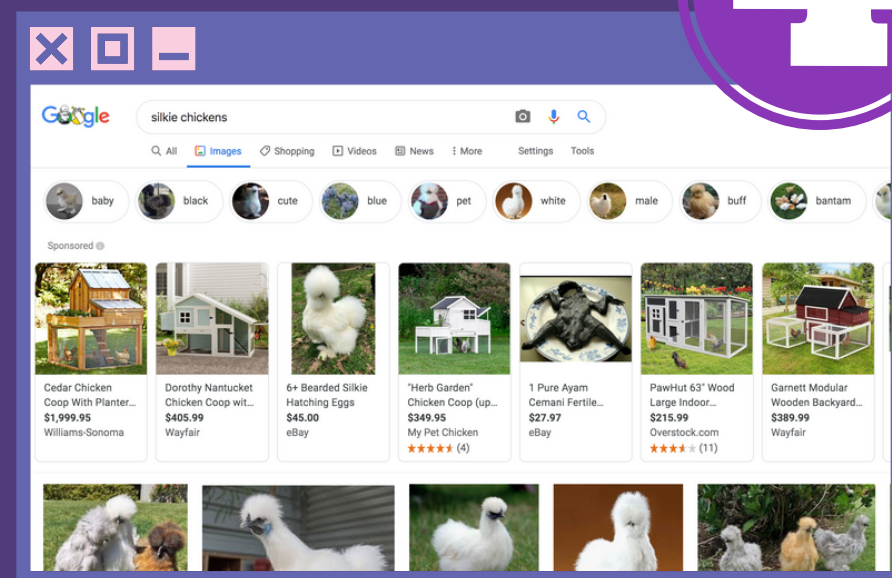
# JS-LAND





1

PLEASE GIVE ME  
GOOGLE.COM/SEARCH?Q=CHICKENS



4

FRONT END

2

HANG ON,



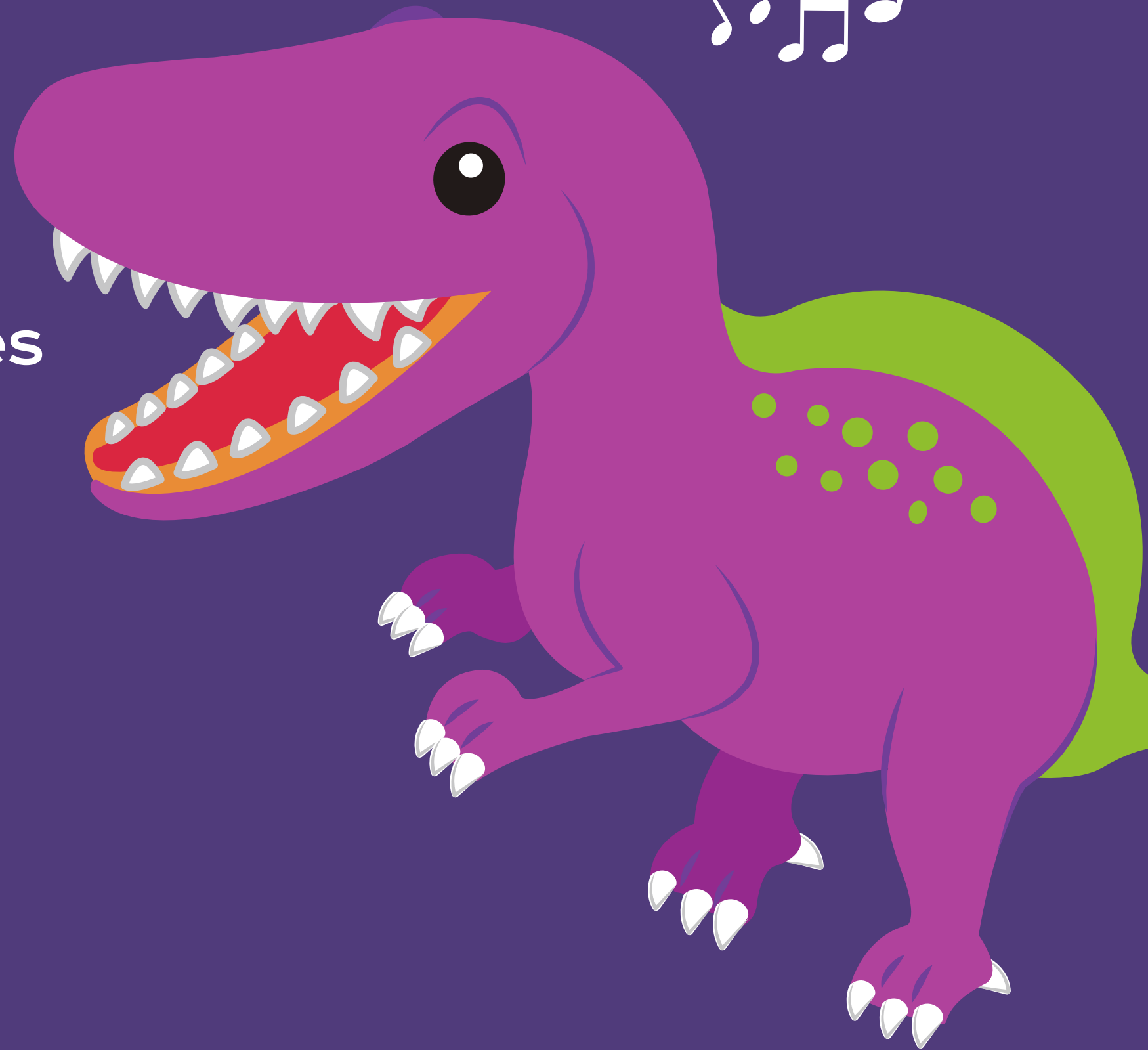
3

HERE YOU GO!



BACK END

THE  
PURPLE CSS – adjectives  
DINO HTML – nouns  
DANCED JS – verbs





1

LEARN JS ON  
ITS OWN. NO  
HTML/CSS.



2

USE JS TO  
MANIPULATE  
HTML/CSS

# Primitive Types

## THE BASIC BUILDING BLOCKS

Number

String

Boolean

Null

Undefined

\* Technically there are two others: Symbol and BigInt



N

# DIFFERENT DATA TYPES

## Hall & Oates - When The Morning Comes

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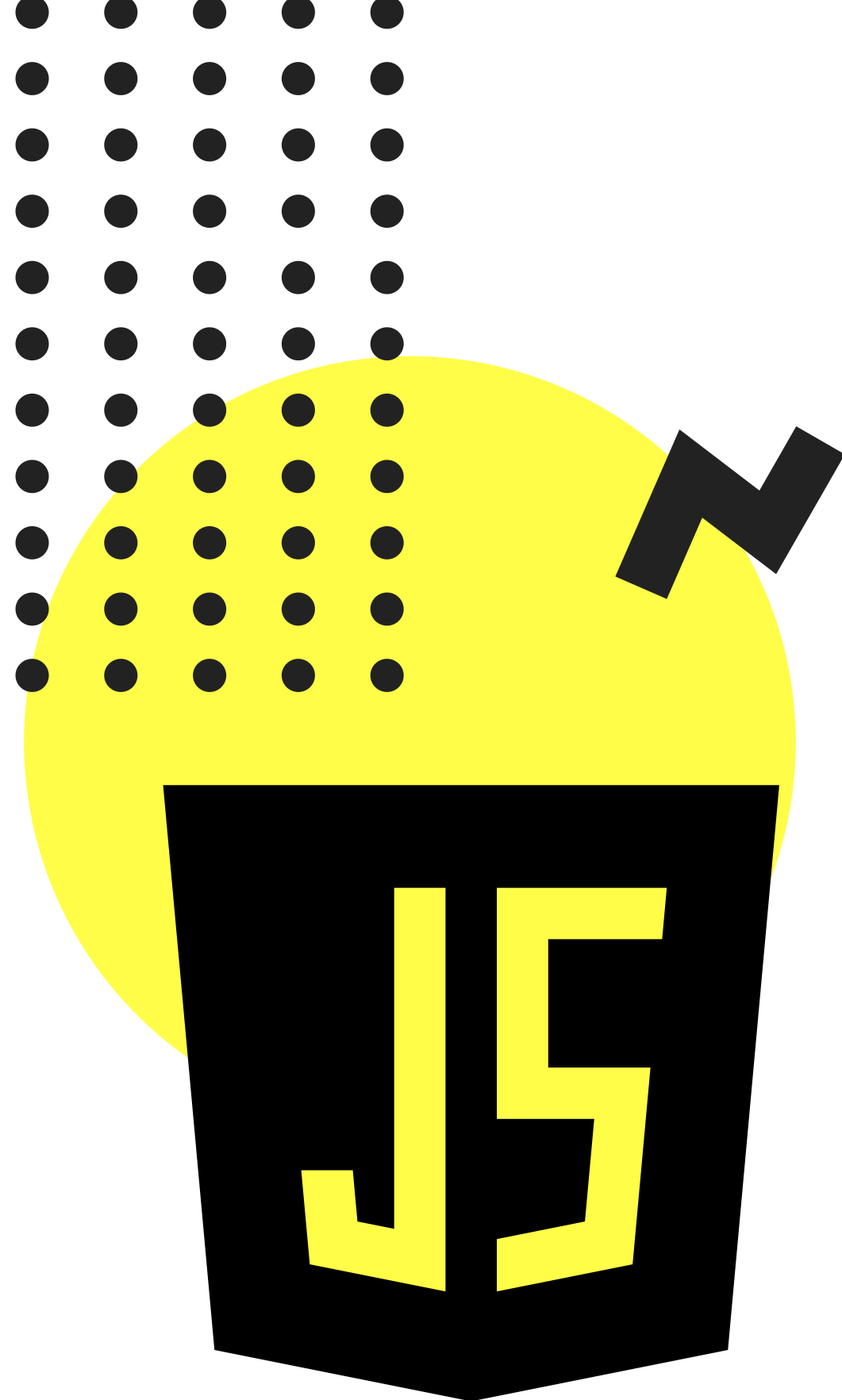


**mickey castle**  
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# Running Code in The Console

## THE EASIEST PLACE TO START

Early on, we'll run our code using the Chrome developer tools console. Then, we'll learn how to write external scripts.





50

7

3.874

0.99

-45

-777.23444

# Numbers

## IN JAVASCRIPT

- JS has **one** number type
- Positive numbers
- Negative numbers
- Whole numbers (integers)
- Decimal numbers

# Math Operations



```
//Addition  
50 + 5 //55
```

```
//Subtraction  
90 - 1 //89
```

```
//Multiplication  
11111 * 7 //77777
```

```
//Division  
400 / 25 //16
```

```
//Modulo!!  
27 % 2 //1
```

// creates a comment  
(the line is ignored)



NOT A NUMBER

**NaN**

NaN is a numeric value that represents  
something that is...not a number



# Not A Number



```
0/0 //NaN
```

```
1 + NaN //NaN
```

WHAT DOES THIS  
EVALUATE TO??



4 + 3 \* 4 / 2

WHAT DOES THIS  
EVALUATE TO??



```
(13 % 5) ** 2
```

WHAT DOES THIS  
EVALUATE TO??



200 + 0/0



# Variables

## VARIABLES ARE LIKE LABELS FOR VALUES

- We can store a value and give it a name so that we can:
- Refer back to it later
- Use that value to do...stuff
- Or change it later one



# BASIC SYNTAX

```
let someName = value;
```



# BASIC SYNTAX



```
let year = 1985;
```

Make me a variable called "year" and give it the value of 1985

# RECALL VALUES



```
let hens = 4;
```

```
let roosters = 2;
```

```
hens + roosters //6
```

# RECALL VALUES



```
let hens = 4;
```

```
//A raccoon killed a hen :(  
hens - 1; //3
```

```
hens; //Still 4!
```

```
//To actually change hens:  
hens = hens - 1;  
hens //3
```

This does not change the  
value stored in hens

This does!

# CONST



```
const hens = 4;  
hens = 20; //ERROR!
```

```
const age = 17;  
age = age + 1; //ERROR!
```

`const` works just like  
let, except you CANNOT  
change the value

NOT ALLOWED!  
YOU'RE IN TROUBLE!!  
I'M TELLING MOM!!!

# WHY USE CONST?



```
const pi = 3.14159;  
  
const daysInWeek = 7;  
  
const minHeightForRide = 60;
```

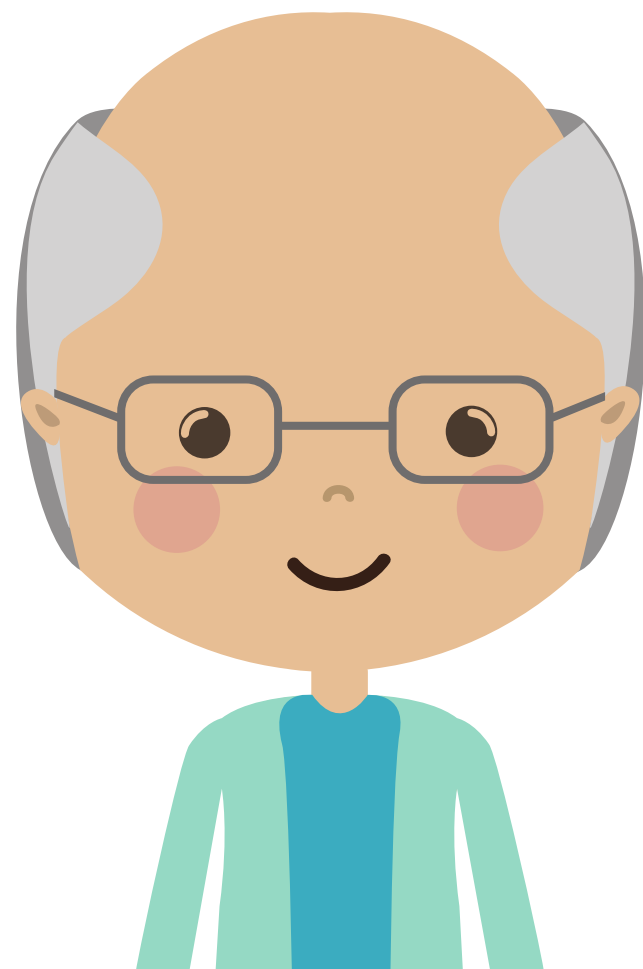

Once we cover Arrays & Objects, we'll see other situations where *const* makes sense over *let*.



# VAR

## THE OLD VARIABLE KEYWORD

BEFORE LET & CONST, VAR WAS THE ONLY WAY OF DECLARING VARIABLES. THESE DAYS, THERE ISN'T REALLY A REASON TO USE IT.



# What is the value of totalScore?



```
let totalScore = 199;  
totalScore + 1;
```



# What is the value of totalScore?



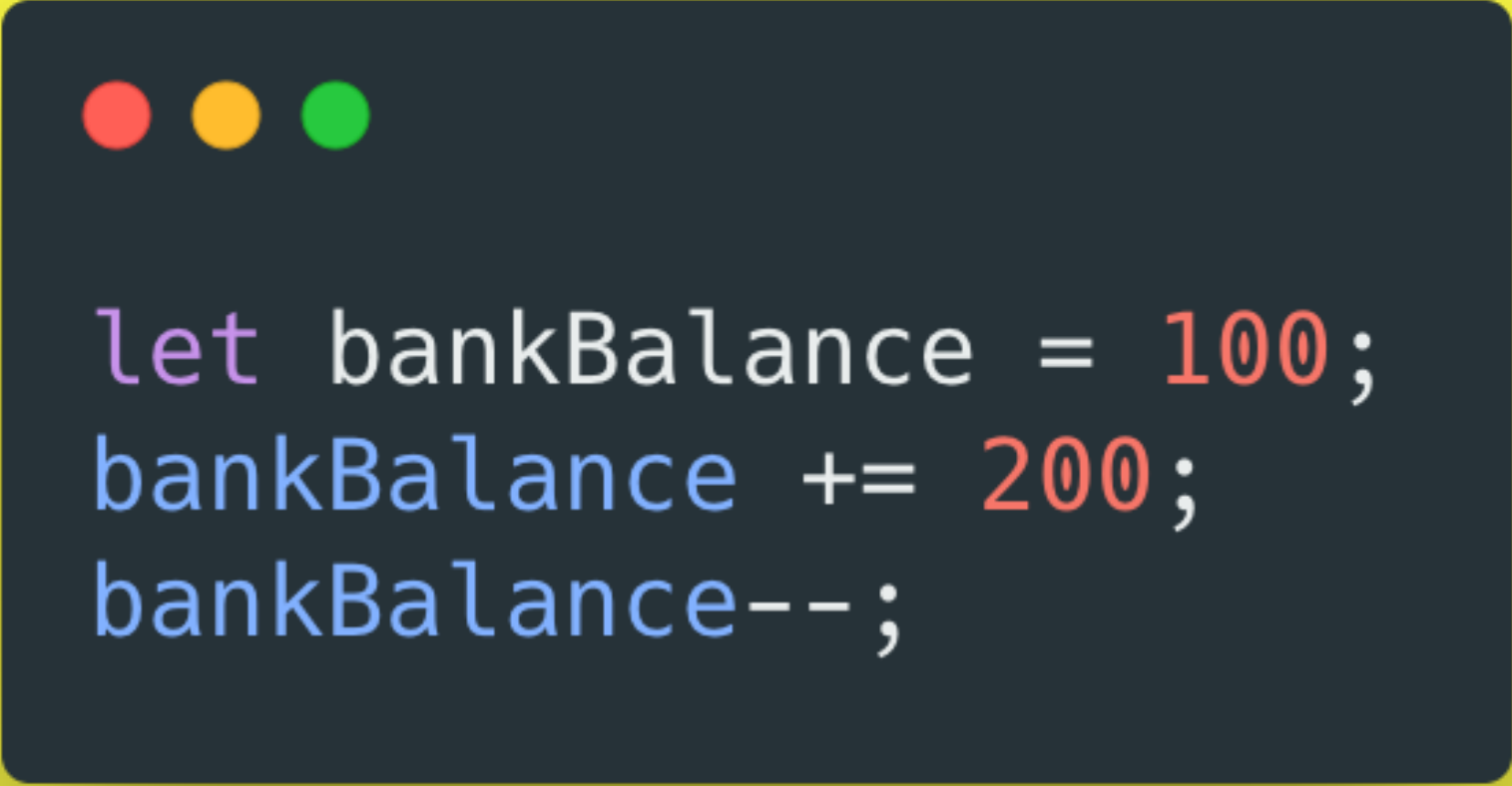
```
let totalScore = 199;  
totalScore + 1;
```

# What is the value of temperature?



```
const temperature = 83;  
temperature = 85;
```

# What is the value of bankBalance?



```
let bankBalance = 100;  
bankBalance += 200;  
bankBalance--;
```



# BOOLEANS

TRUE


or

FALSE



# Booleans

## TRUE OR FALSE



```
let isLoggedIn = true;  
let gameOver = false;  
const isWaterWet = true;
```

Booleans are very simple.  
You have two possible options: true  
or false. That's it!

# Variables Can Change Types

```
let numPuppies = 23; //Number  
numPuppies = false; //Now a Boolean  
numPuppies = 100;    //Back to Number!
```

It doesn't really make sense to change from a number to a boolean here, but we can!