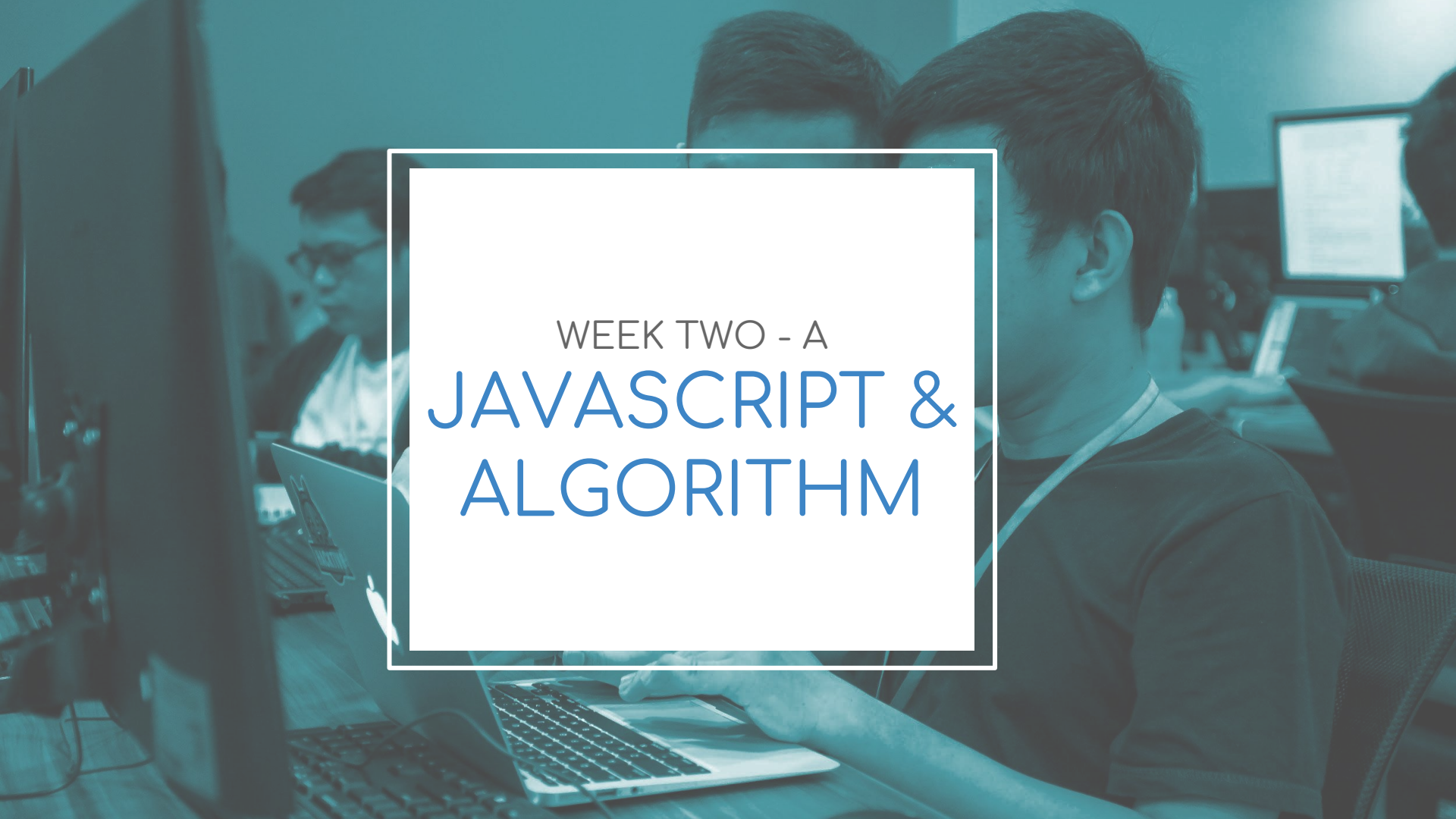


WEEK TWO - A

JAVASCRIPT & ALGORITHM

ALGORITHM

Understanding

Algorithm

Set of steps or procedure to accomplish a task

Understanding

Algorithm

Can be used to solve hard or complex problems!

Ex: solve travelling salesman problem

Understanding

Algorithm

We need to put these steps for computer to run!

We need to

Talk to Computers

Count 5 + 2!
Grab my coffee!
Find my soulmate!

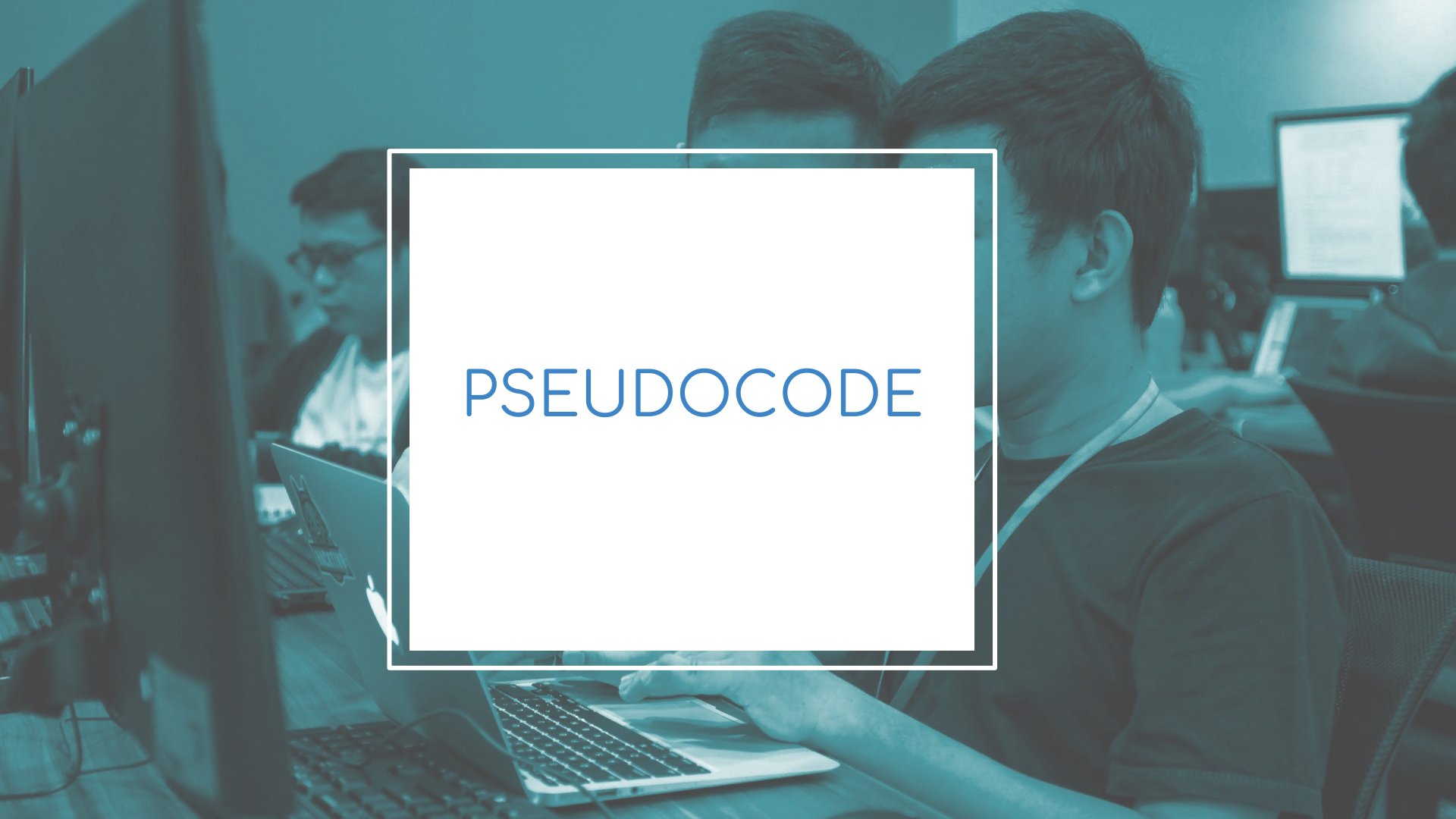
10111001 ?
10100100 ?
10011101 ?

We need

Programming Languages

```
5 + 2;
desk.drink;
world.find('girlfriend');
```

```
=> 7
=> 'coffee'
=> error: not found
```



PSEUDOCODE

Why

Pseudocode

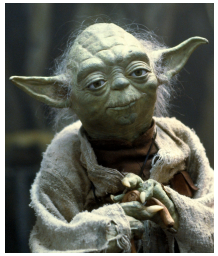
There are **tons** of programming languages!

Why

Pseudocode

Human Language

Pseudocode



Code in programming languages

Why

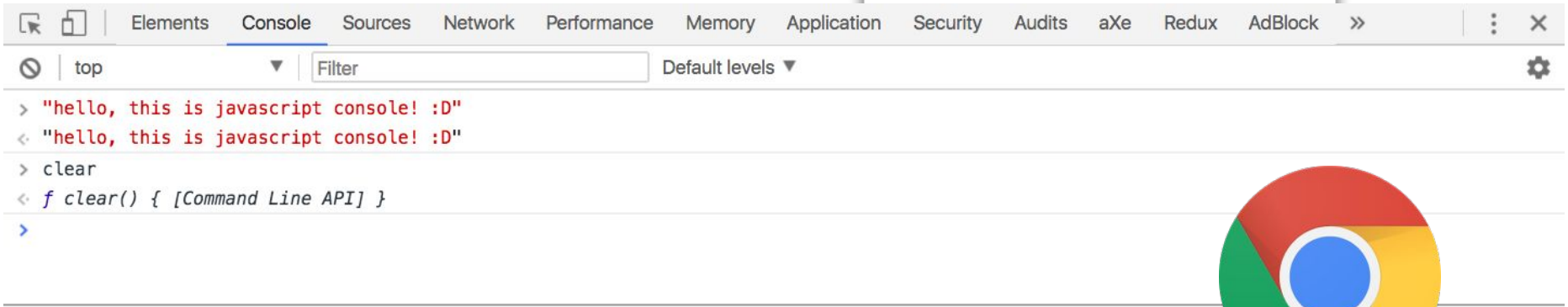
Pseudocode

Train logical thinking and algorithm without the "magics" of each different programming languages


WHERE'S
JAVASCRIPT

JavaScript

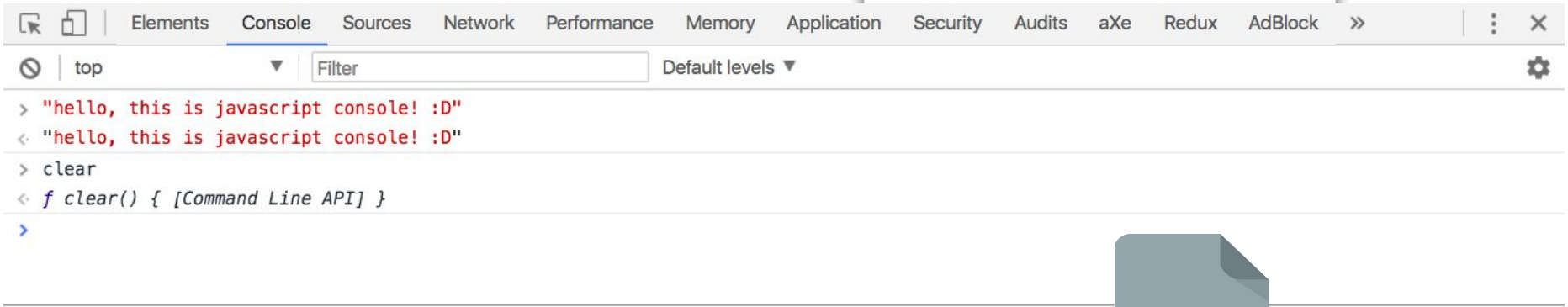
Console



Chrome dev tools / javascript console

JavaScript

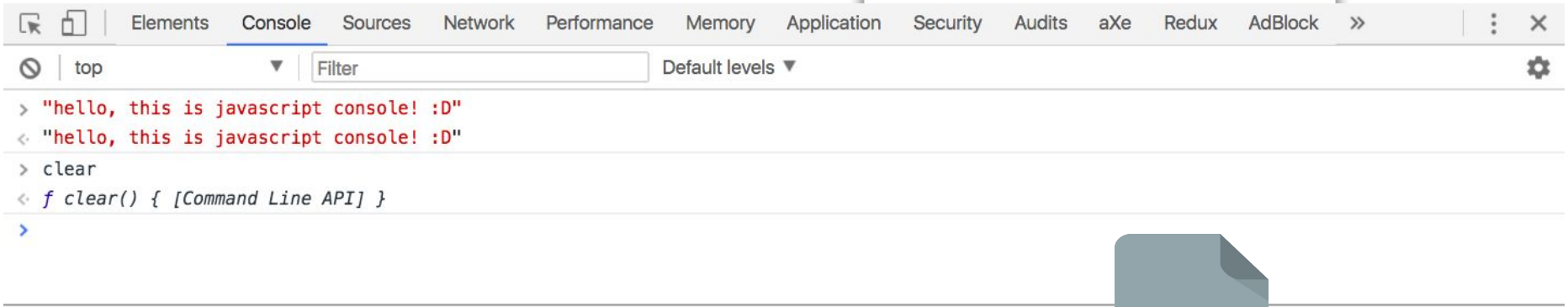
Running JS



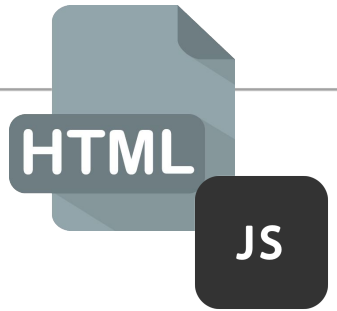
In HTML, use <script> tag to write JavaScript directly in HTML file!

JavaScript

Running JS

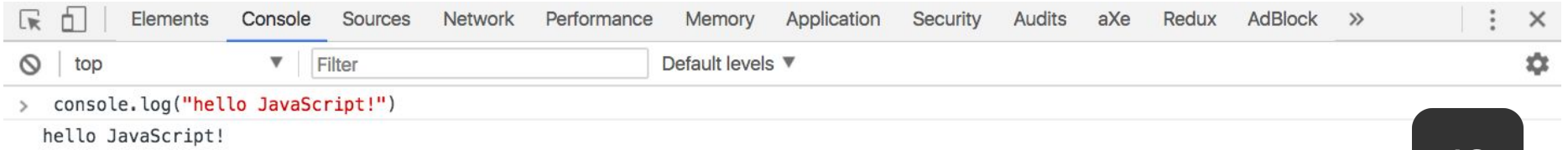


Or, import them from .js files!



JavaScript

Basic Browser Script



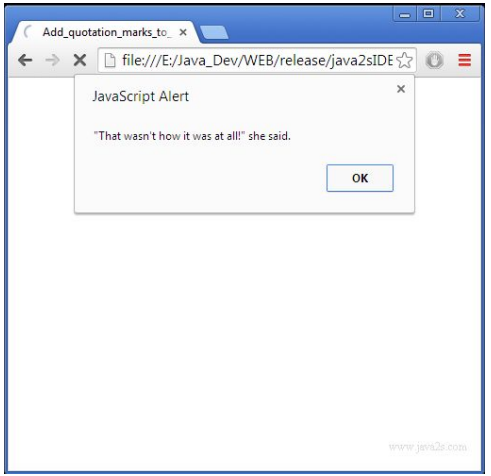
JS

console.log("hello JavaScript")

Show messages in the console

alert("hello JavaScript")

Show alert message in the browser



WRITING JAVASCRIPT

Writing JavaScript

Statements

Statement

smallest step to do something

Real life Ex

close left eye, move hand position from left to right

Writing JavaScript

Data Types

Data have some types:

Primitives

number, string, boolean, null

Structured

array, object (week 5)

Writing JavaScript

Data Types

Primitives

- Number: 5, 12, 3.14
- String: ‘hello’
- Boolean: true, false
- null

Writing JavaScript

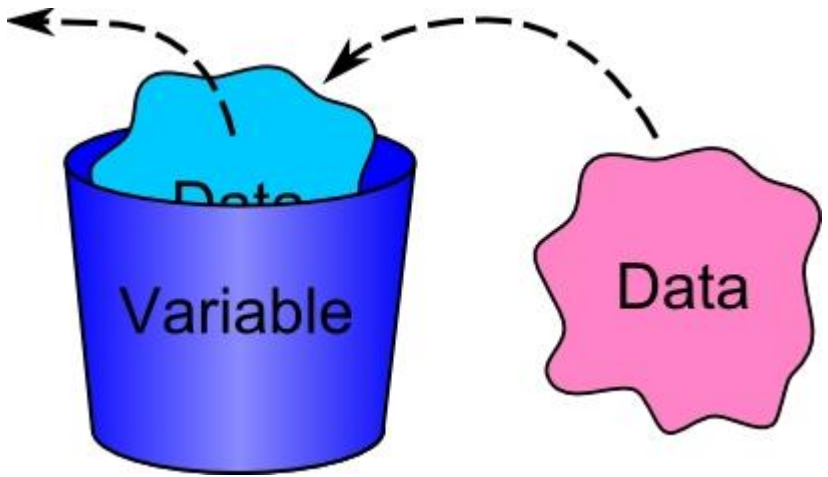
Variables

Declaration

```
var bucket;
```

Assignments

```
bucket = 'data';
```



Writing JavaScript

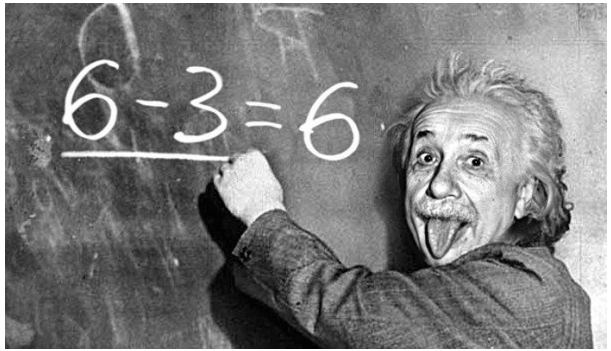
Variables

Declaration + Assignment

```
var myNumber = 2;
```

Re-assignment

```
myNumber = myNumber + 1;
```



Writing JavaScript

Variables

No duplicate Declaration!

```
var myNumber;
```

```
var myNumber = 2;
```

Writing JavaScript

Operations

Mathematical Operations

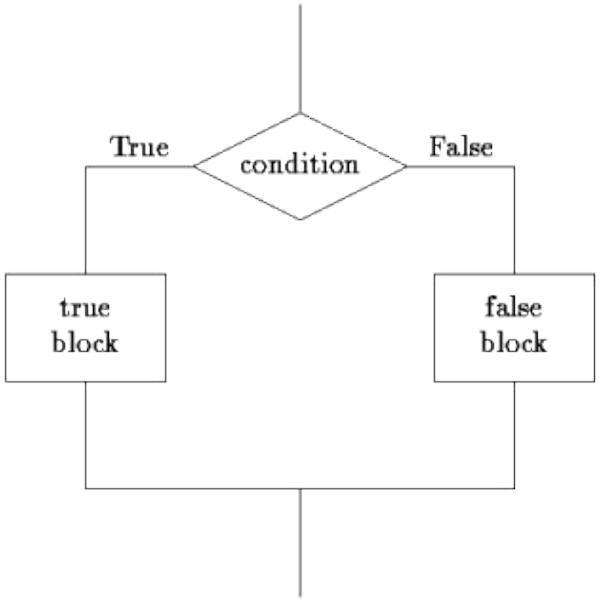
+ - * /

Watch out for doing math operation to non numbers!

Try 5 + ‘hello’ or true - 8!

Writing JavaScript

Conditionals



Writing JavaScript

Conditionals

IF - ELSE

SWITCH - CASE (Explore on your own on Day 1)

Writing JavaScript

Conditionals

Truthy and Falsy Values

Values that become a boolean if is in conditional

Truthy - should be true

Ex: any values that's not in falsy

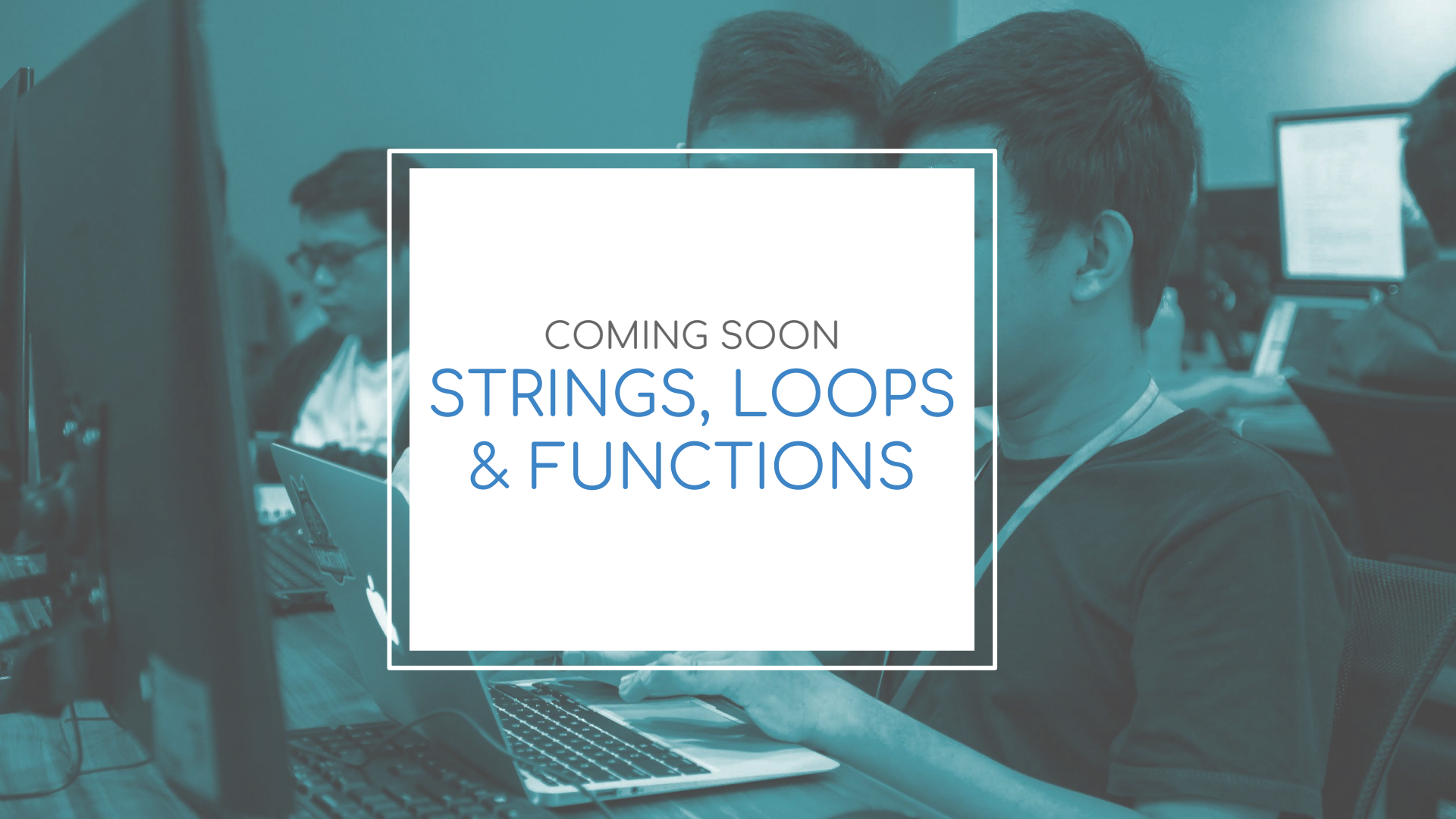
Falsy - should be false

Ex: false, 0, '' (empty string), undefined, NaN


GOT SOME
QUESTIONS?

“Homework”

Looping


COMING SOON
STRINGS, LOOPS
& FUNCTIONS


THANK YOU AND
SEE YOU !