# JavaScript - Coffee Script

## General

CoffeeScript is a JavaScript abstract language which simplfies the syntax of JavaScript and compiles into it.

## Syntax

### Assignment

number = 42

=> number = 42;

opposite = true

=> opposite = true;

### Conditionals

number = -42 if opposite

if (opposite) {

number = -42;

}

### Functions

square = (x) -> x \* x

square = function(x) {

return x \* x;

};

### Objects

math =

root: Math.sqrt

square: square

cube: (x) -> x \* square x

math = {

root: Math.sqrt,

square: square,

cube: function(x) {

return x \* square(x);

}

};

### Splats

race = (winner, runners...) ->

print winner, runners

race = function(winner, ...runners) {

return print(winner, runners);

};

### Existence

alert "I knew it!" if elvis?

if (typeof elvis !== "undefined" && elvis !== null) {

alert("I knew it!");

}

### Array Comprehensions

cubes = (math.cube num for num in list)