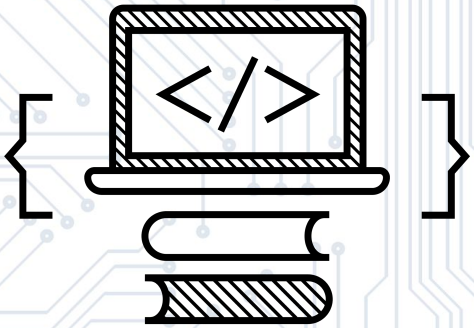
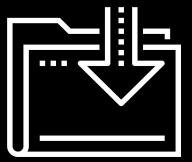


Hard Hat Zone: Constructors at Work

Web Development Boot Camp

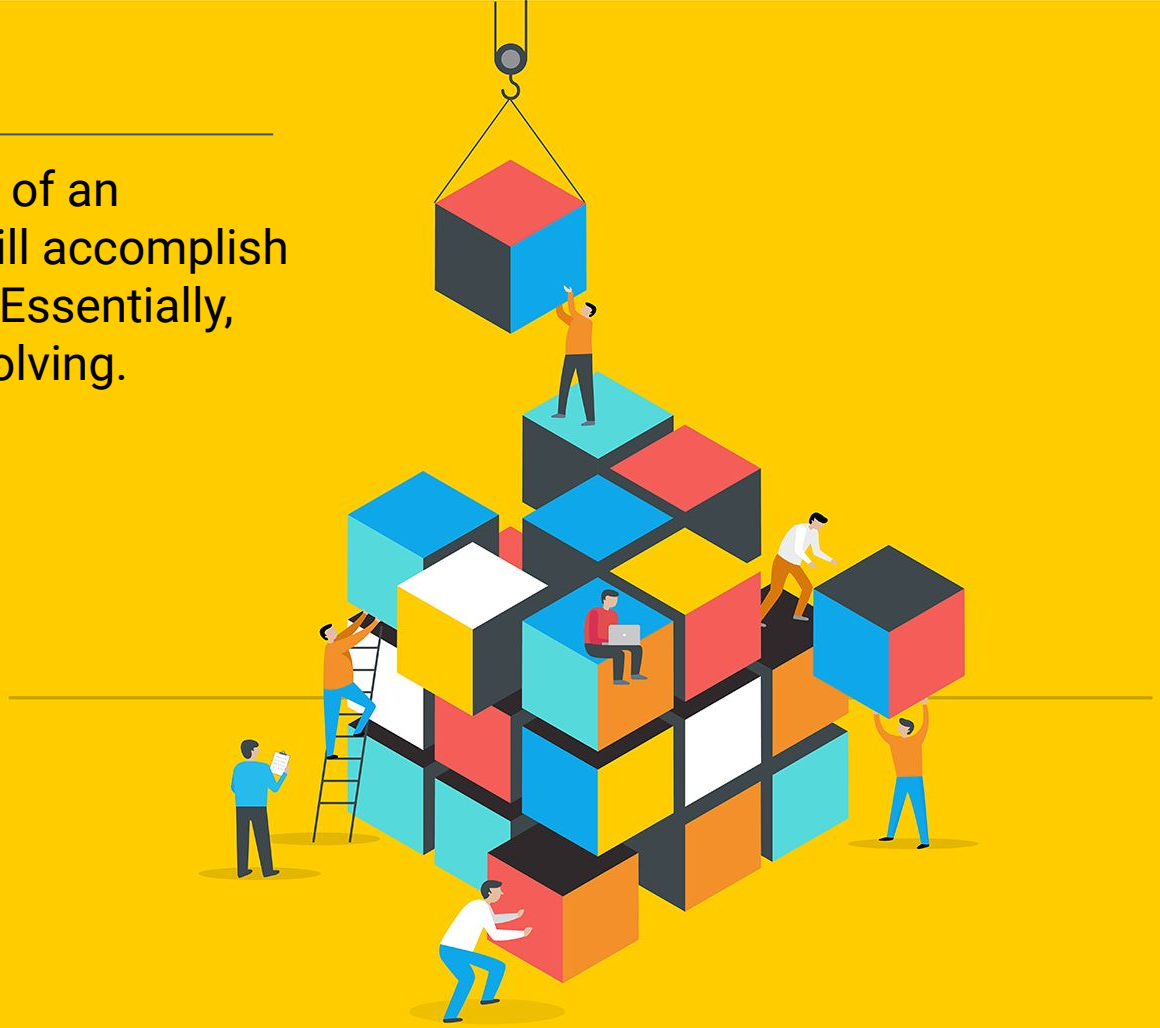
Lesson 10.1



What is programming?

Programming

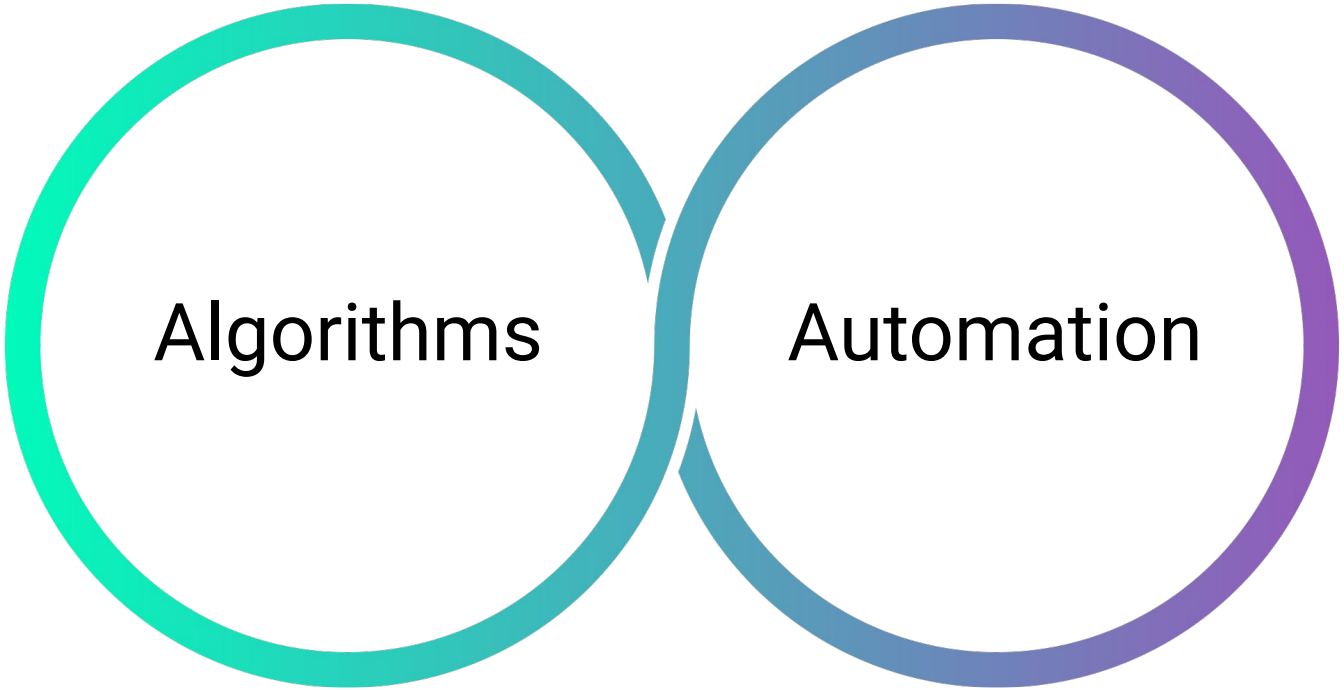
The designing and building of an executable program that will accomplish a specific computing task. Essentially, programming is problem solving.



What problems do we solve?

Algorithms and Automation

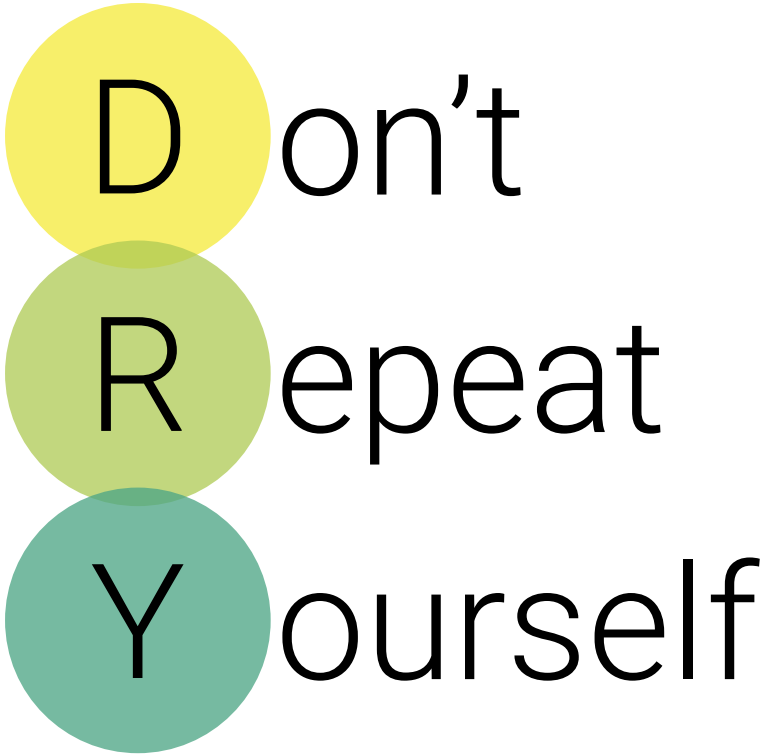
Programming allows for us to solve almost any task or problem on a computer. There are two primary categories:



What is DRY?

Don’t Repeat Yourself!

Rewriting code wastes time, memory, and can confuse later readers and/or contributors to your code.



What is an object?

Objects

Objects in JavaScript are unordered collections of related data built on a `key:value` structure where values can be any `data-type`, including functions.

```
const person = {
 name: ['Bob', 'Smith'],
 age: 32,
 gender: 'male',
 interests: ['music', 'skiing'],
 bio: function() {
   alert(this.name[0] + ' ' + this.name[1] + ' is ' + this.age + ' years old. He
likes ' + this.interests[0] + ' and ' + this.interests[1] + '.');
 },
 greeting: function() {
   alert('Hi! I\'m ' + this.name[0] + '.');
 }
};
```

Why are objects important in JavaScript?

Everything is an Object!

Well, almost everything

data-types objects:

- Arrays
- Date
- Math
- ...and more!
- Even Functions are objects!

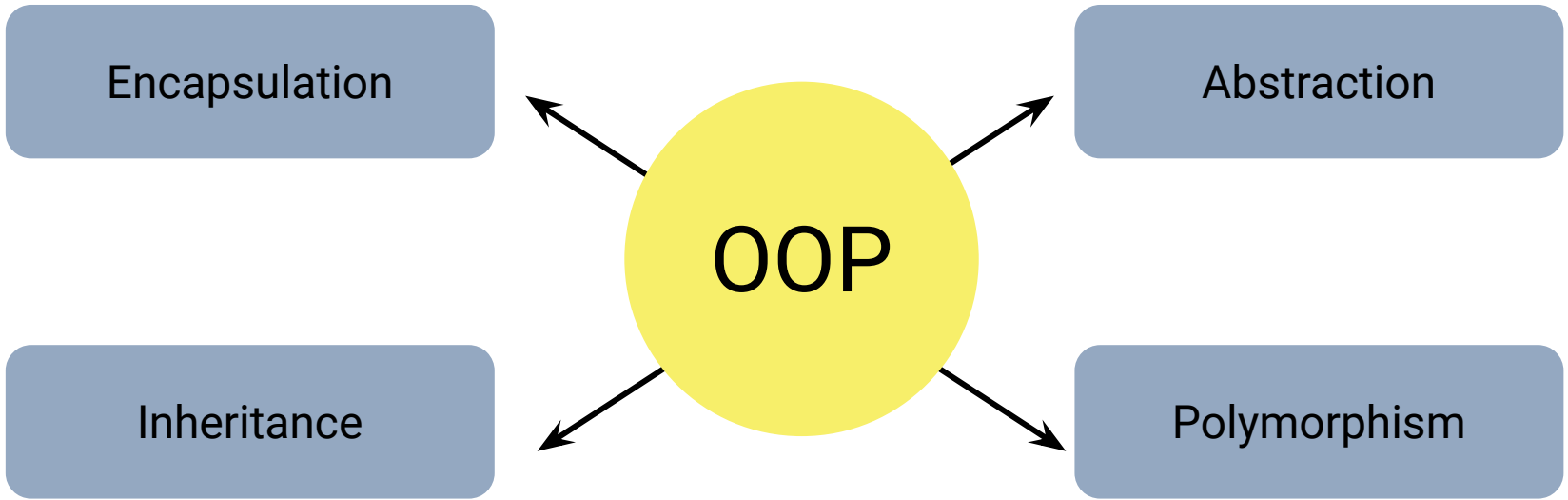
Primitive types are *not* objects:

- Boolean
- Null
- Undefined
- Number
- String
- Symbol

What is object-oriented programming?

Object-Oriented Programming (OOP)

OOP is a programming paradigm or pattern of programming centered around objects. Problems are thought of in a way in which a collection of objects work together to solve a problem. Objects can speak to one another, and this ability makes them suitable for managing and solving large and complex problems.



<Time to Code>