

# Fundamentals | Variables

# ■ What is a variable?

- ◆ Assign data to a temporary memory location
  - Allows programmer to easily work with memory
- ◆ Can be set to any value & type
- ◆ Immutable by default, but can be mutable
  - Immutable: cannot be changed
  - Mutable: can be changed

# Examples

```
let two = 2;  
let hello = "hello";  
let j = 'j';  
let my_half = 0.5;  
let mut my_name = "Bill";  
let quit_program = false;  
let your_half = my_half;
```

# ■ Recap

- ◆ Variables make it easier to work with data
- ◆ Variables can be assigned to any value
  - This include other variables
- ◆ Immutable by default
  - *mut* keyword changes to mutable