

Hello, World!

launch  _code

Pseudocode

Website with examples

- <https://github.com/digshake/launchcode-helloworld>

What is pseudocode?

- First:
 - What is code?
 - What is a programming language?

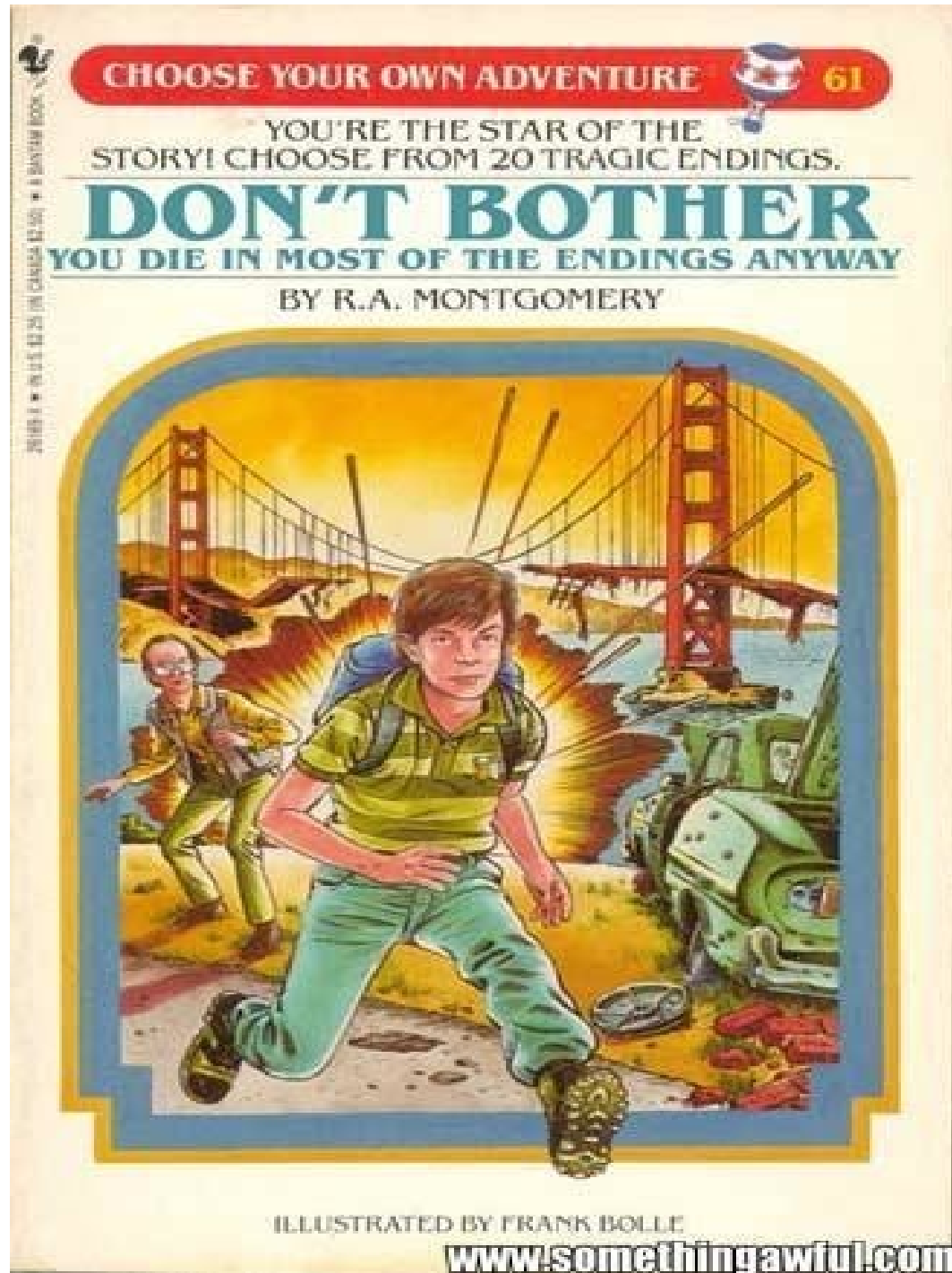
Variables

- Variables are used to tell stories
 - Let me tell you a story using variables!

Exercise

- Tell the following story using variables:
 - Michael is 30 years old
 - Sally is twice Michael's age
 - Sally is $\frac{3}{4}$ ths as old as Bill
 - Rachel is 52 years younger than Bill
 - The average age of the group is....?

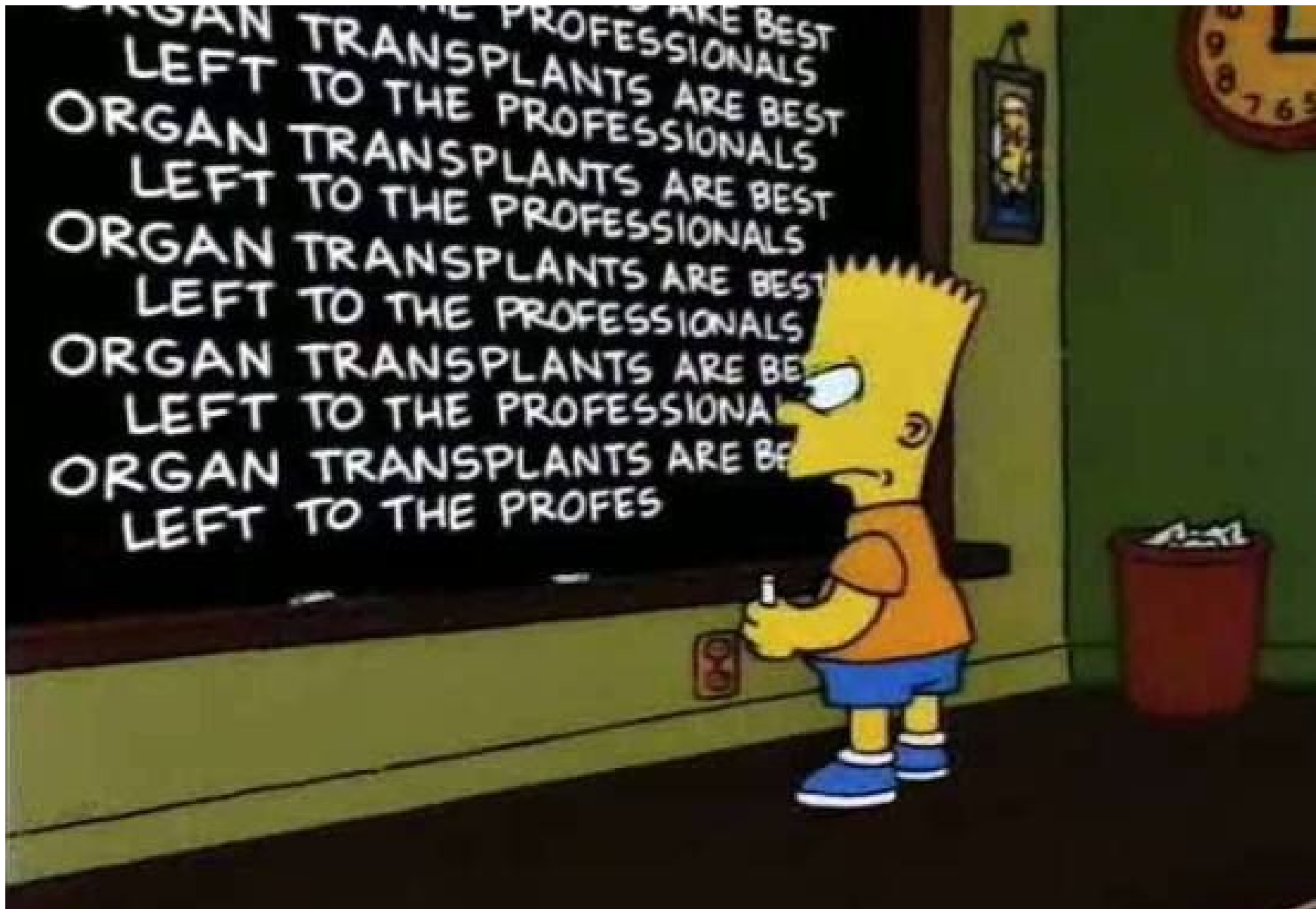
Choice



Exercise

- You are given two variables, x and y
 - Write code that ensures that x will always be larger than y , swapping them if necessary

Iteration



Exercise

- Write code (using loops!) that prints:
 - The values from 0 to 10 (inclusive)
 - The values from 1 to 10 (inclusive)
 - The values from 4 to 19 (inclusive)
 - Even values between 5 and 12 (inclusive)

Exercise

- The fibonacci sequence is given as:

0, 1, 1, 2, 3, 5, 8, 13,

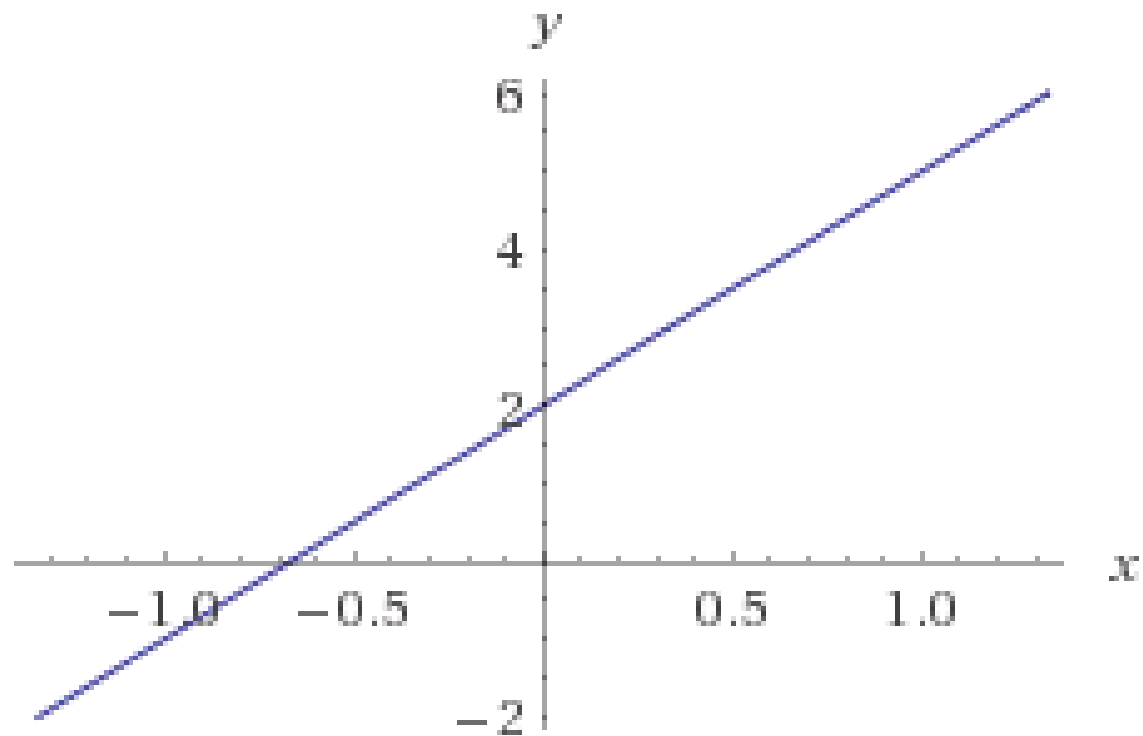
- Write pseudocode to print the first 50 fibonacci numbers

Exercise

- Write code to do the following:
 - Your code should count from 0 to 100
 - If the current number is divisible by 3, print "fizz"
 - If the current number is divisible by 5 print "buzz"
 - If it is divisible by 3 and 5, print "fizzbuzz"
 - Otherwise, print the number

Functions

- $f(x) = 3x + 2$



(x from -1 to 1)

Exercise

- Change your fibonacci code to be a function. The function should take in a value called N and return the Nth fibonacci number. So if $N = 1$ then return 0, if $N = 2$ then return 1, etc.
- Write a function called mult that takes in two values, x and y, and returns the product. You may not use * to accomplish this.