## MORE PROSAICALLY

- You learn basic Python.
- You learn some basic principles of Computer Science.
- Enough to get you ready to do some Data Science.

## IN MORE DETAIL

- 1. Introduction
  - 1. Overall goals and structure of course
  - 2. Introduction to algorithms
  - 3. Languages, types, variables
  - 4. The python console
- 2. Control flow
  - 1. Basic types in Python
  - 2. Comparison operations
  - 3. Branching
  - 4. while, for loops
  - 5. Break
- 3. Strings, simple algos
  - 1. String indexing and slicing
  - 2. string mutability
  - 3. Exhaustive search
  - 4. Bisection search
- 4. Functions, tuples, lists
  - 1. Functions, abstraction, decomposition, reuse
  - 2. functions in Python; variable scope, functions as arguments, visibilty
  - 3. Tuples; defining, immutability, unpacking, operations
  - 4. Lists; defining, mutability, indexing, iterating, operations