Lecture 9 – Randomness, Iterations
Announcements

- HW04
  - Due Tuesday (03/01)

- Lab 4 this week (posted tonight)

- Checkpoint/Project 1:
  - Paired assignment that covers the previous section of the course material
  - Due Thursday 03/03
Control Statements

These statements *control* the sequence of computations that are performed

- The keywords *if* and *for* begin control statements
- The purpose of *if* is to define functions that choose different behavior based on their arguments
Control and Treatment

- treatment group
- control group
- How do we determine causality?
Random Selection
Random Selection

np.random.choice

- Selects at random
- With replacement
- From an array
- A specific number of times

np.random.choice(some_array, sample_size)
A Longer Array

- `np.append(array_1, value):`
  - new array with value appended to `array_1`
  - value has to be of the same type as elements of `array_1`

- `np.append(array_1, array_2):`
  - new array with `array_2` appended to `array_1`
  - Elements of `array_2` have to be of the same type as elements of `array_1`
for statements

- **for** is a keyword that begins a control statement
- The purpose of **for** is to perform a computation for every element in a list or array