Repetition

- Sometimes don’t know exactly how many times a set of instructions are repeated.
- Stopping is based on a condition
- Example:
  - Game of Chess, how many moves until win
  - Stop: when markers are in check mate position

- Indefinite Repetition
  - Where number of repetitions not known in advance
  - Use **while** statement

**While statement**

- While some condition is true
  - execute instructions

**Looping – exact number of times**

- Count loop

- How many steps to get to the panda?
  - 3, 6, 8?
General “Rule of Thumb”

- As a general rule, a While loop should be written so the loop will eventually end
  - Requires statements inside the loop change the conditions of the world such that condition for While eventually becomes false
- If While loop never ends
  - Infinite while loop

Compare – What is difference?

What happens when run?

What happens, when does the loop stop?
What happens, when does the loop stop? (numbers different)

What happens when this runs?

What code could I use to stop this loop?

Announcements

• RQ12 and videos for next time
Class Today

• Catching dinner