

CompSci 94

Undetermined Repetition with While loop

October 1, 2020



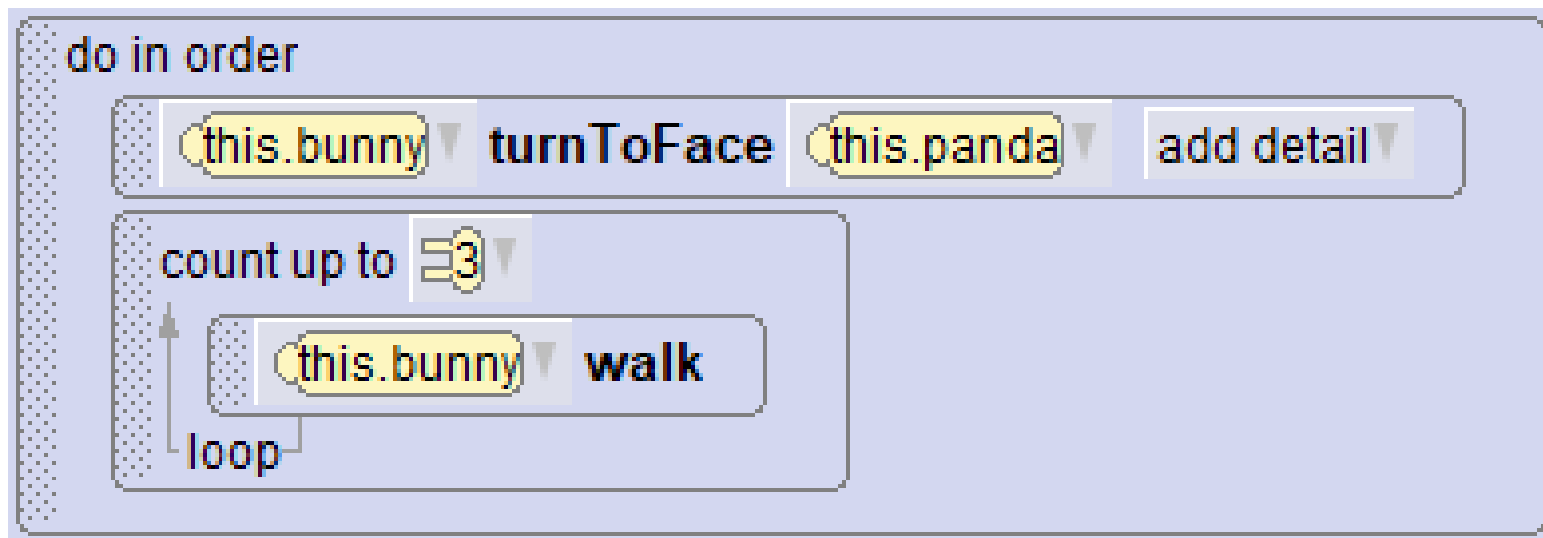
Prof. Susan Rodger

Announcements

- QZ12 and videos for next time

Looping – exact number of times

- Count loop



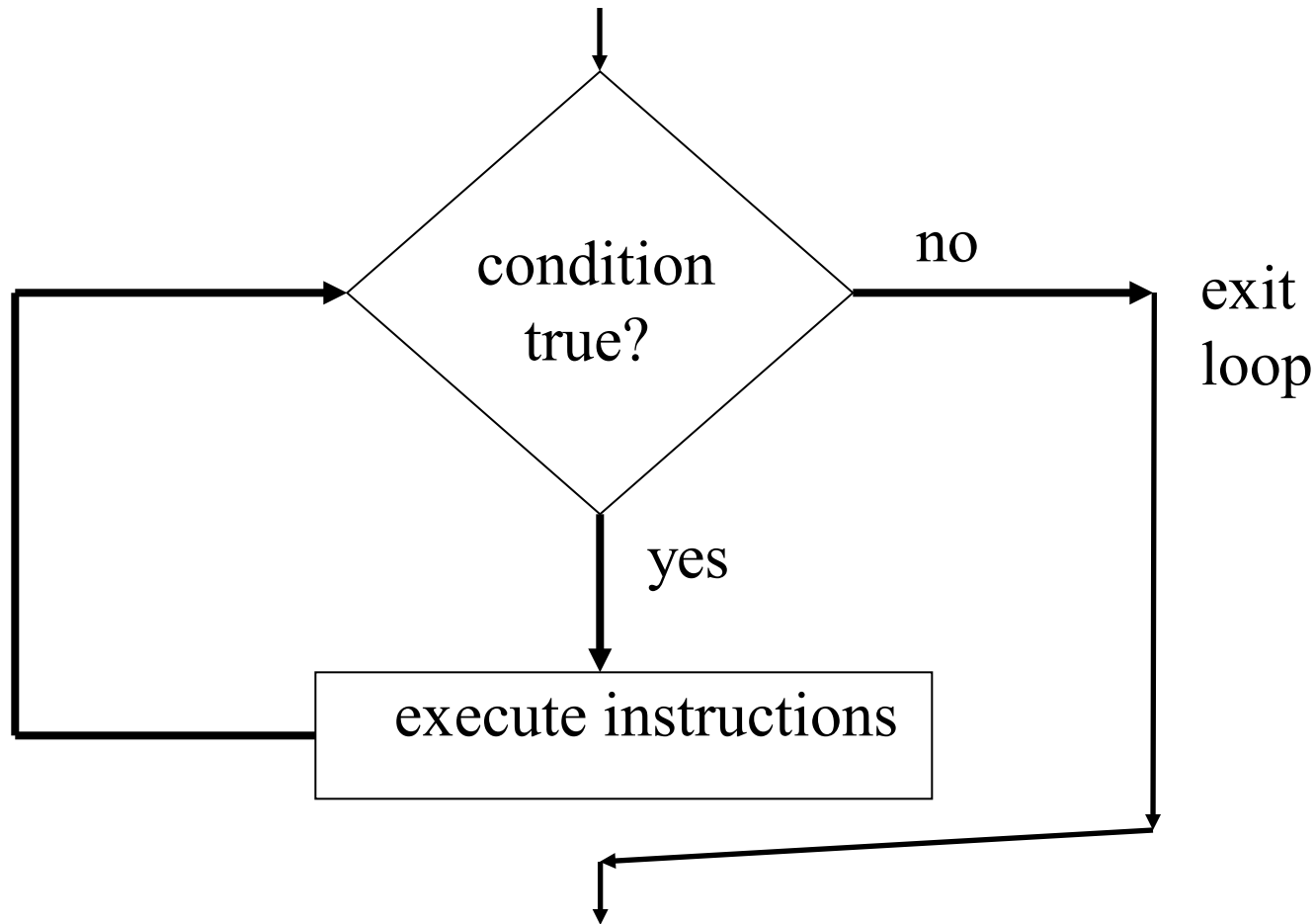
- How many steps to get to the panda?

10/1/20 3, 6, 8?

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

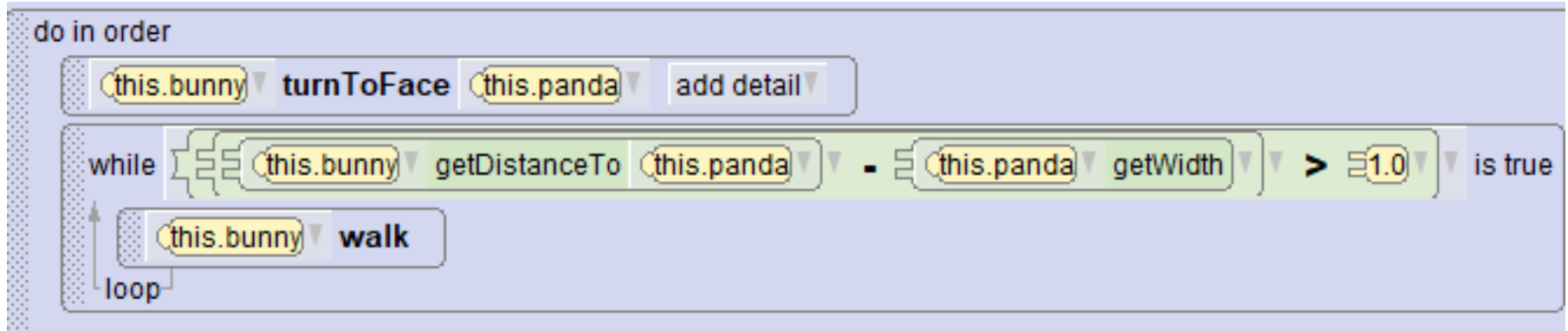
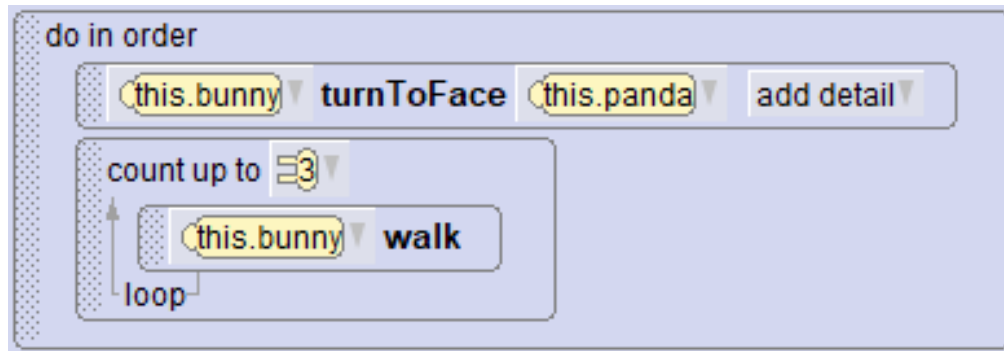


- While some condition is true

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?



WOTO While loop
<http://bit.ly/94f20-1001-1>

Class Today

- Catching dinner

