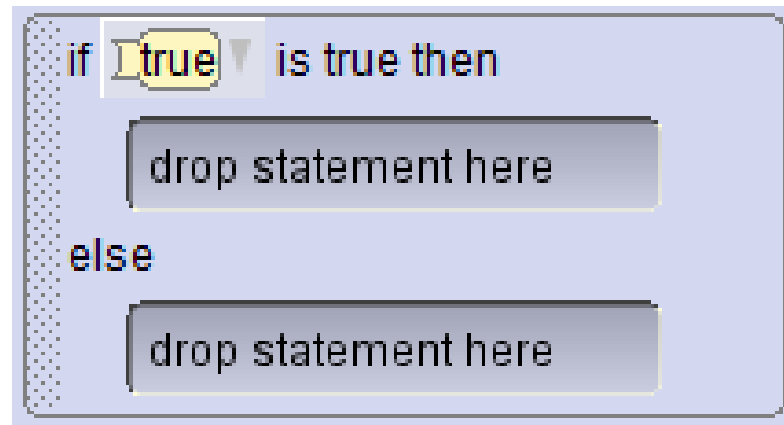


CompSci 94

Random Numbers, Making Decisions with If statements

September 15, 2020



Prof. Susan Rodger

Announcements

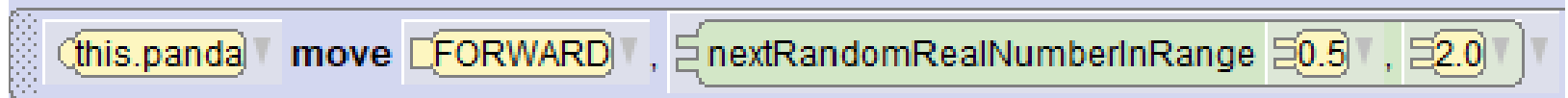
- Exam 1 is Sept 29
- Assignment 3 due Sept 22
 - Have you started yet?
- QZ09 due Thursday – 10:15am
- Don't get behind, be sure to check your grades on Sakai for Classwork

Constant Variable

- What is a constant variable?
- How do you create a constant variable in Alice?
- How do you use a constant variable?

Random Numbers

- What is a random number?
- In Alice, how does one get a random number in an instruction?

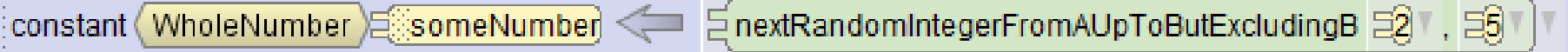


- Give examples of numbers in this range?



Random Integers

- How many different integers are a possibility with this statement?



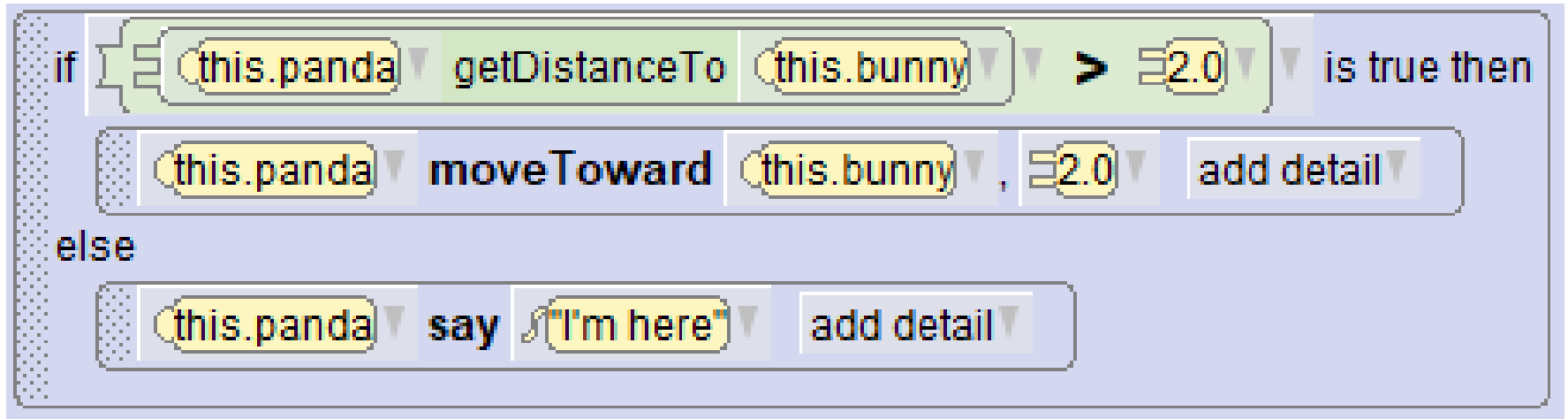
A Scratch code block with a light blue background. It starts with the word "constant" in a small grey box. This is followed by a yellow box containing the text "WholeNumber". Then is an equals sign "=" in a small yellow box, followed by another yellow box containing the text "someNumber". To the right of this is a grey arrow pointing left. To the left of the arrow is a green box containing the text "nextRandomIntegerFromAUpToButExcludingB". To the right of the green box is a small green box containing the number "2", followed by a comma, and then another small green box containing the number "5". Each of these three boxes has a small downward-pointing triangle on its right side.

If statements

- What types can you compare in an if statement?

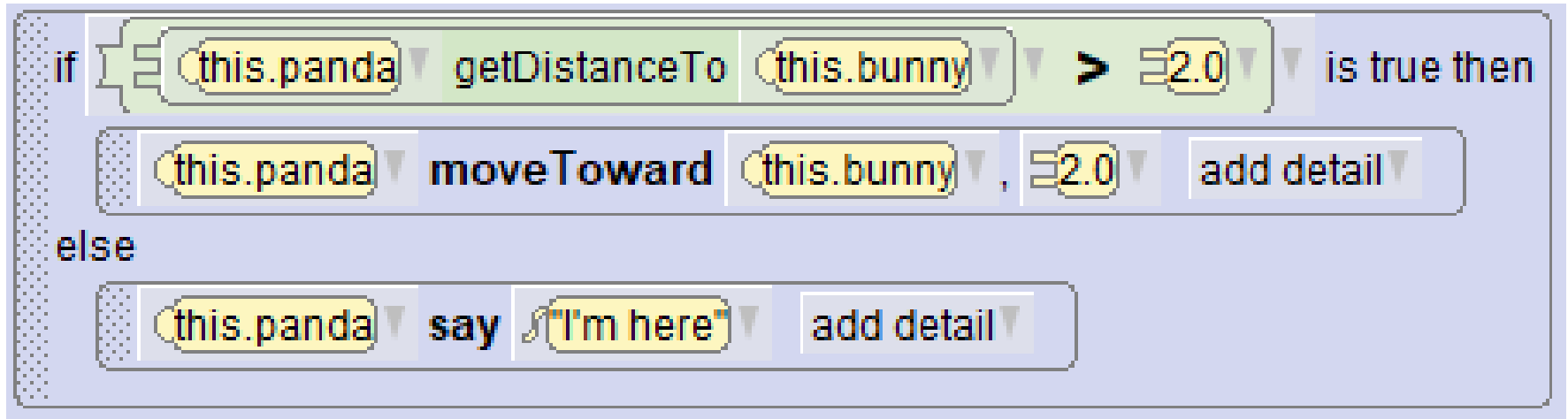
Panda distanceTo

- What does this code do when it executes?



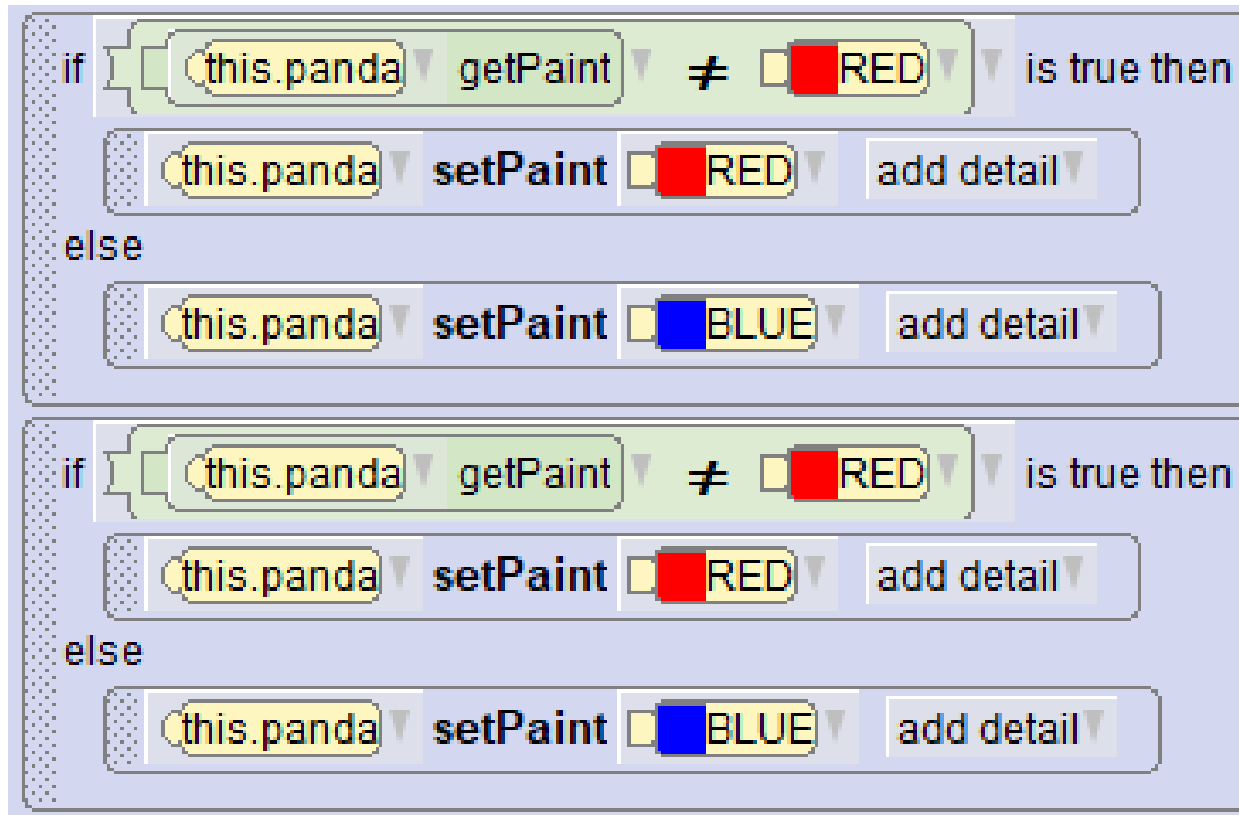
Create line w/ Panda distanceTo

- How does one create **first line** of this code?

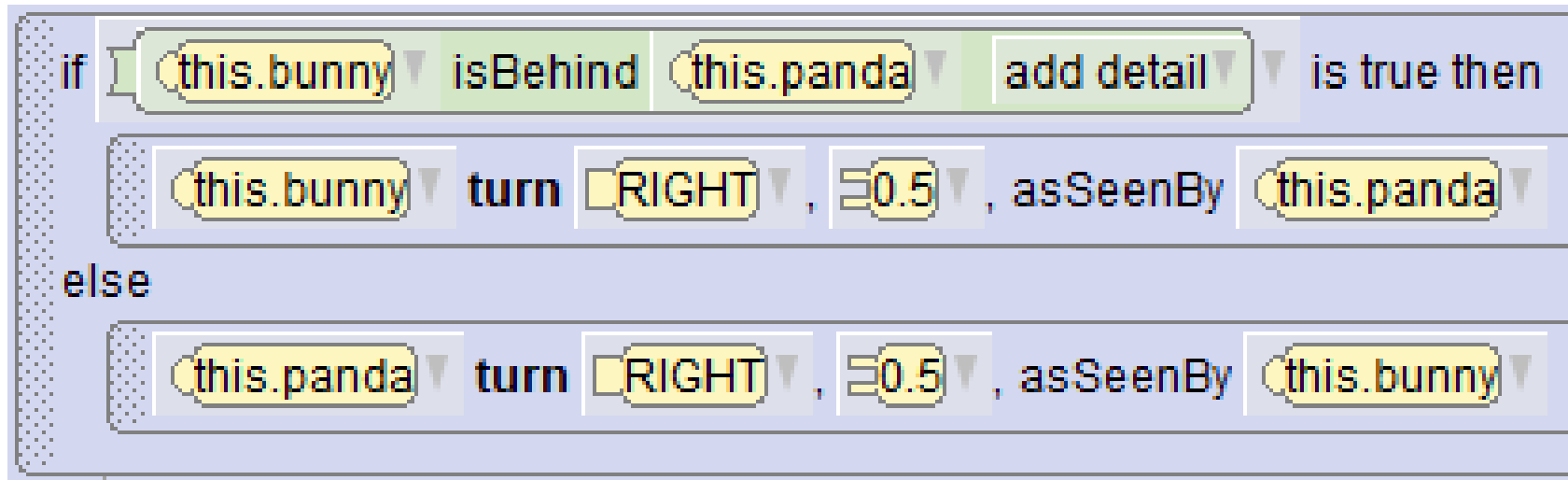


Making decisions - If statement

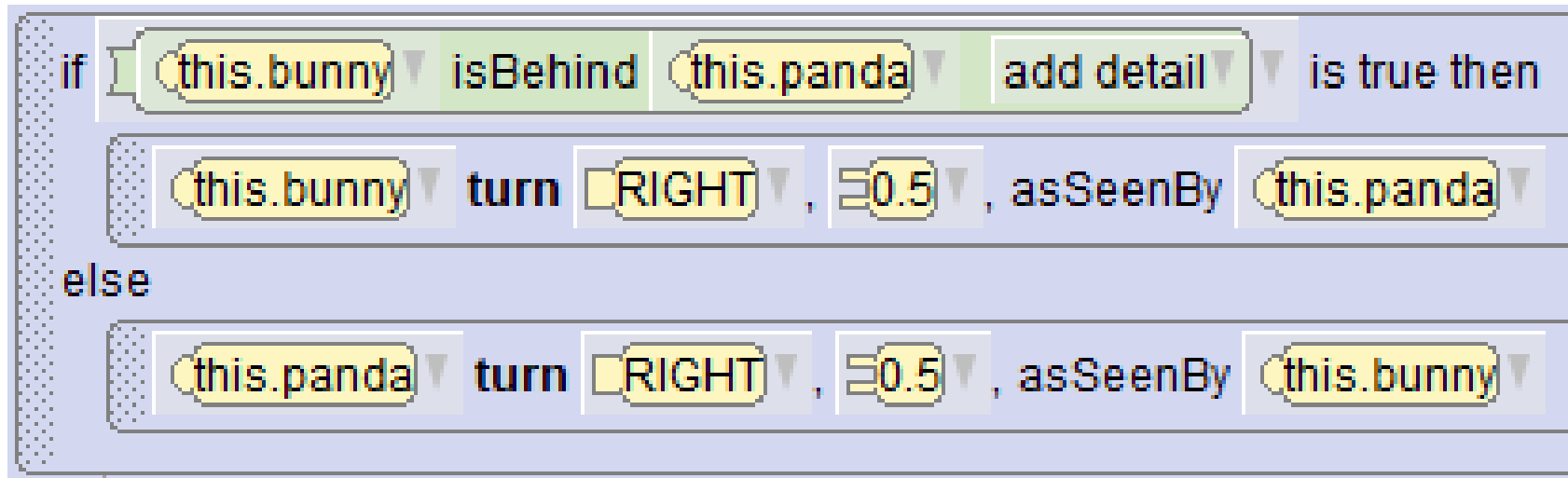
- What happens when this code runs?



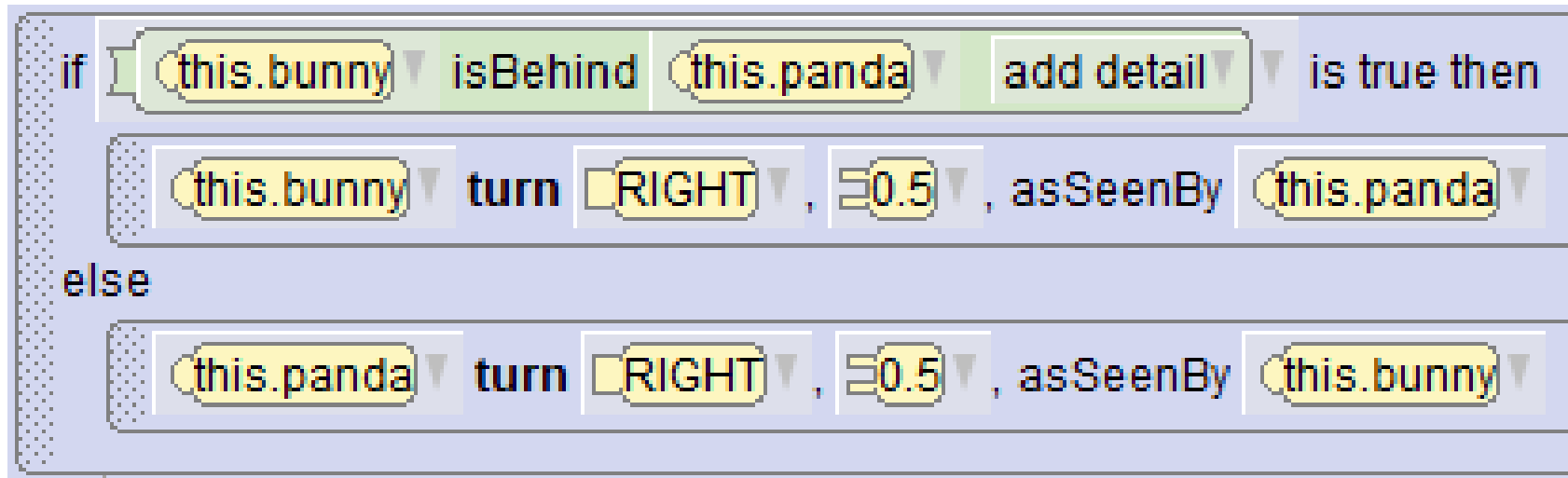
What happens when this If executes?



Execute a copy of the if again?



Execute a third copy of the if?



Class Today

- Working with random numbers and making decisions

