CompSci 94
Random Numbers, Making Decisions with If statements
February 7, 2019

Prof. Susan Rodger

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?

• How many different integers are a possibility with this statement?
If statements

- What types can you compare in an if statement?
  - Numbers
  - Directions
  - Paints
  - Text Strings
  - Objects
  - etc

Panda distanceTo

- What does this code do when it executes?
  - If the panda is more than two units from the bunny, the panda moves two units towards the bunny
  - Otherwise the panda says “I’m here”

- If the panda is 3 units from the bunny, can both the panda move and say “I’m here” happen?
  - NO! only one

Panda distanceTo

- How does one create this code?
  - First drag in an IF tile and select True
  - Then click on True and select decimal number compare with greater than
  - Select numbers 1.0 and 2.0 – Replace the 1.0 by dragging the function over it

Making decisions - If statement

- What happens when this code runs?
  - Panda turns red and then panda turns blue
Announcements

- Exam 1 is Feb 19
- Assignment 4 due Feb. 12
- RQ 9 due Feb 12

Class Today

- Working with random numbers and making decisions