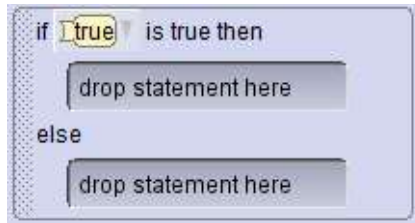# CompSci 94
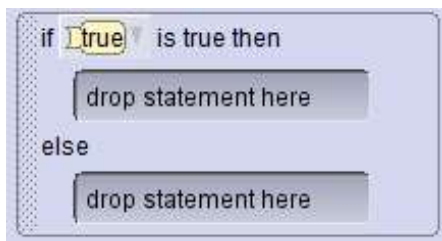# Making Decisions with If statements
October 1, 2024

Prof. Susan Rodger

Announcements

- Assignment 3 due Oct 8!
  - Don't forget the reflect form
- Videos and QZ10 due Thursday, Oct 3 when class starts

- Don't get behind, be sure to check your grades on Canvas for Classwork

If statements

- What types can you compare in an if statement?

Q1 Panda distanceTo

- What does this code do when it executes?

Q2. Create line w/ Panda distanceTo

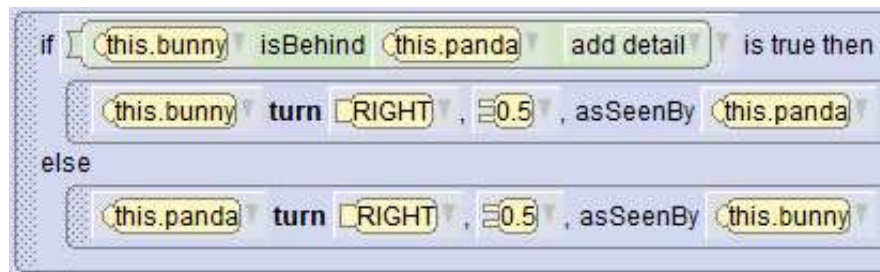- How does one create **first line** of this code?

```
if [ ( this.panda ) getDistanceTo ( this.bunny ) > 2.0 ] is true then
    ( this.panda ) moveToward ( this.bunny ) , 2.0   add detail
else
    ( this.panda ) say  "I'm here"   add detail
```

Q3 Making decisions - If statement

- What happens when this code runs?

```
if [ ( this.panda ) getPaint  ≠  ■RED ] is true then
    ( this.panda ) setPaint ■RED   add detail
else
    ( this.panda ) setPaint ■BLUE   add detail

if [ ( this.panda ) getPaint  ≠  ■RED ] is true then
    ( this.panda ) setPaint ■RED   add detail
else
    ( this.panda ) setPaint ■BLUE   add detail
```

Q4 What happens when this If executes?

```
if [ ( this.bunny ) isBehind ( this.panda )   add detail ] is true then
    ( this.bunny ) turn RIGHT , 0.5 , asSeenBy ( this.panda )
else
    ( this.panda ) turn RIGHT , 0.5 , asSeenBy ( this.bunny )
```

Q5 Execute a copy of the if again?
(execute the same code a second time)

```
if [ ( this.bunny ) isBehind ( this.panda )   add detail ] is true then
    ( this.bunny ) turn RIGHT , 0.5 , asSeenBy ( this.panda )
else
    ( this.panda ) turn RIGHT , 0.5 , asSeenBy ( this.bunny )
```

Q6 Execute a third copy of the if?


```
if [ (this.bunny)  isBehind (this.panda)    add detail ]  is true then
      (this.bunny) turn [RIGHT] , [0.5] , asSeenBy (this.panda)
else
      (this.panda) turn [RIGHT] , [0.5] , asSeenBy (this.bunny)
```

Class Today

- Working with making decisions

I'm taller