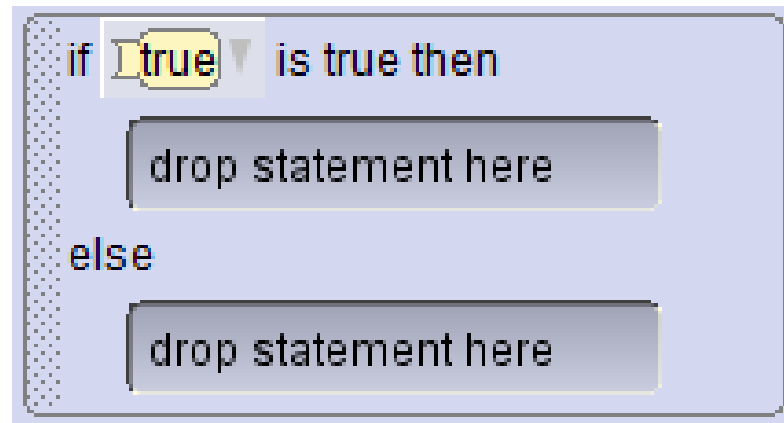# CompSci 94
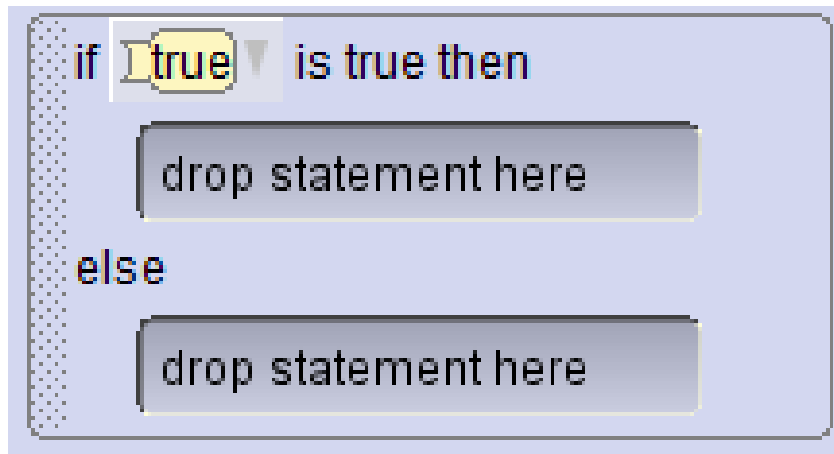# Making Decisions with If statements
October 1, 2024

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

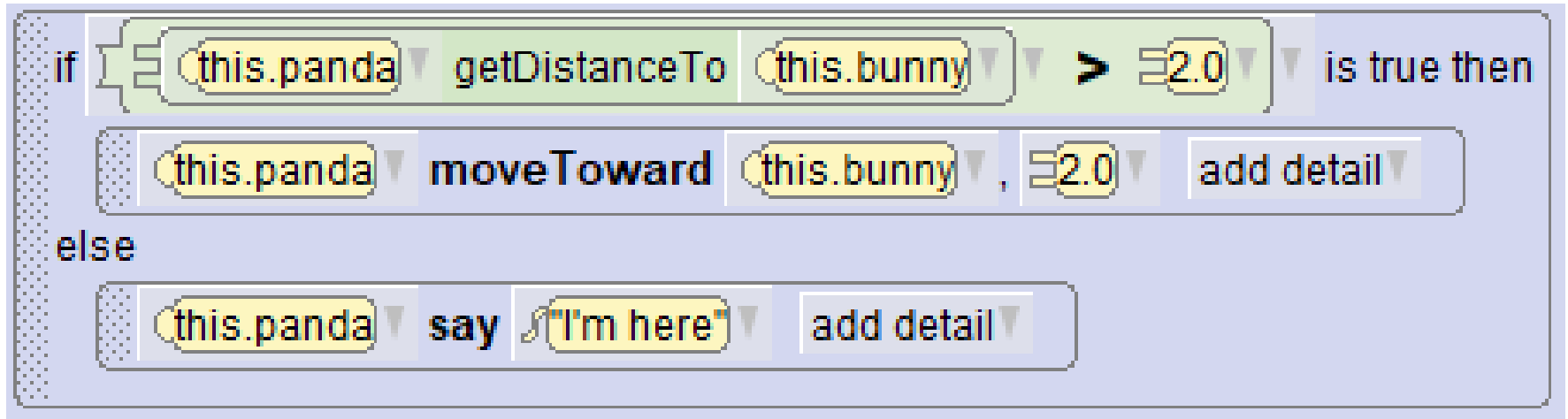- Don't get behind, be sure to check your grades on Canvas for Classwork

If statements

- What types can you compare in an if statement?

Q1 Panda distanceTo
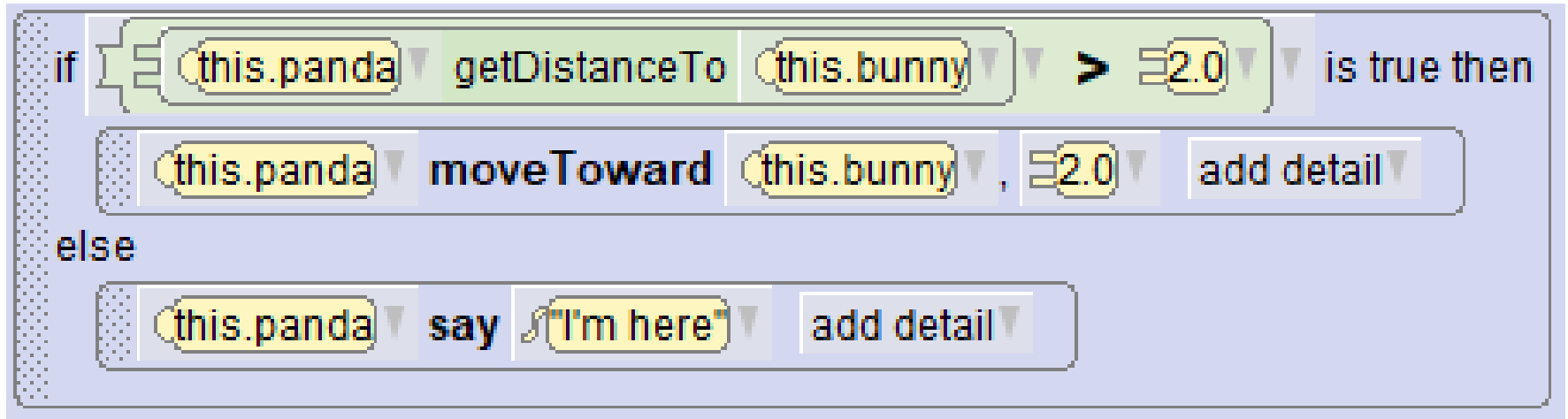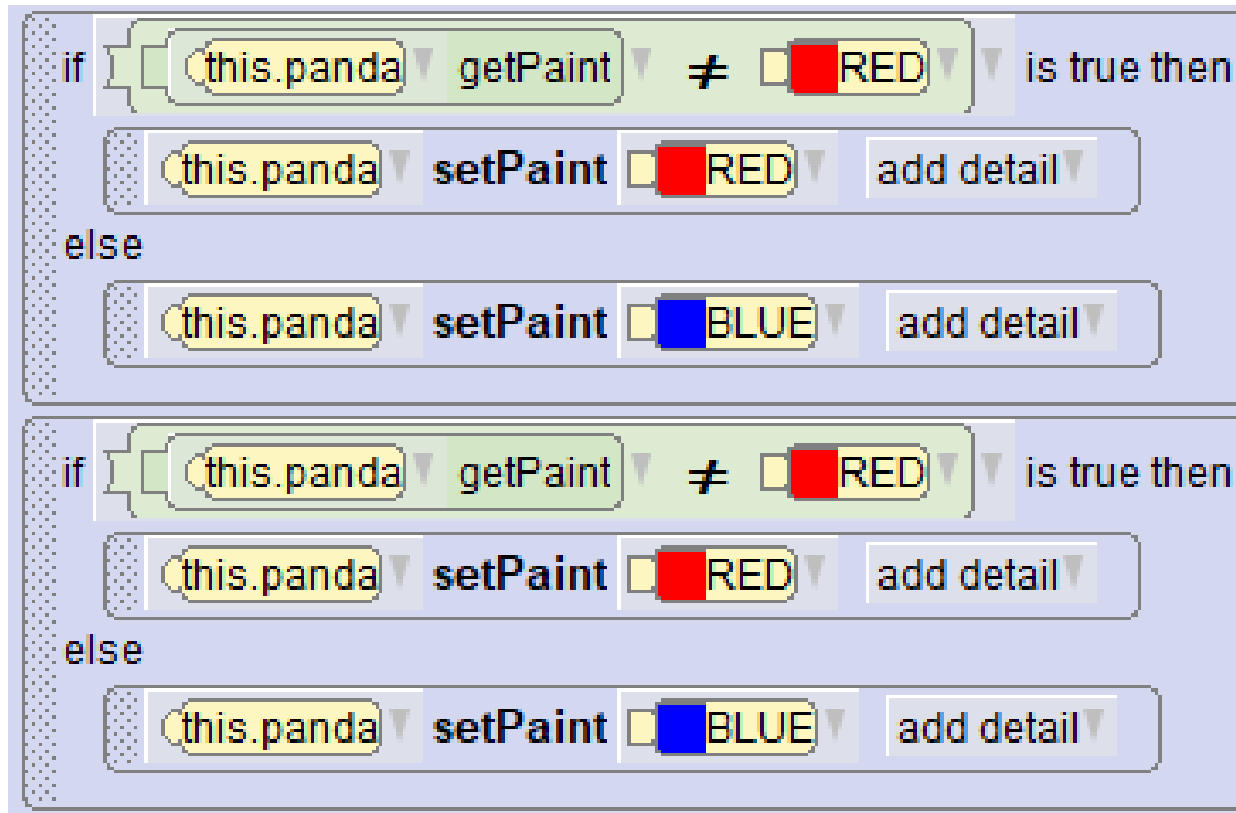
- What does this code do when it executes?


```
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 ▽
```

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▼
```
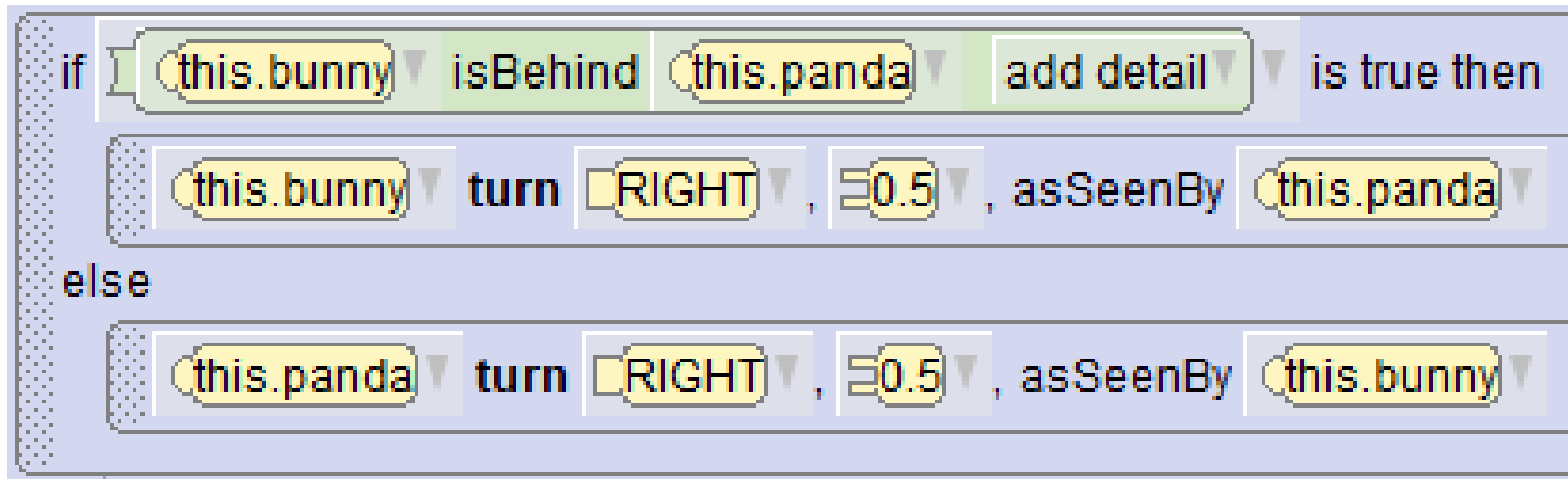
Q3 Making decisions - If statement

- What happens when this code runs?

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)▼
```
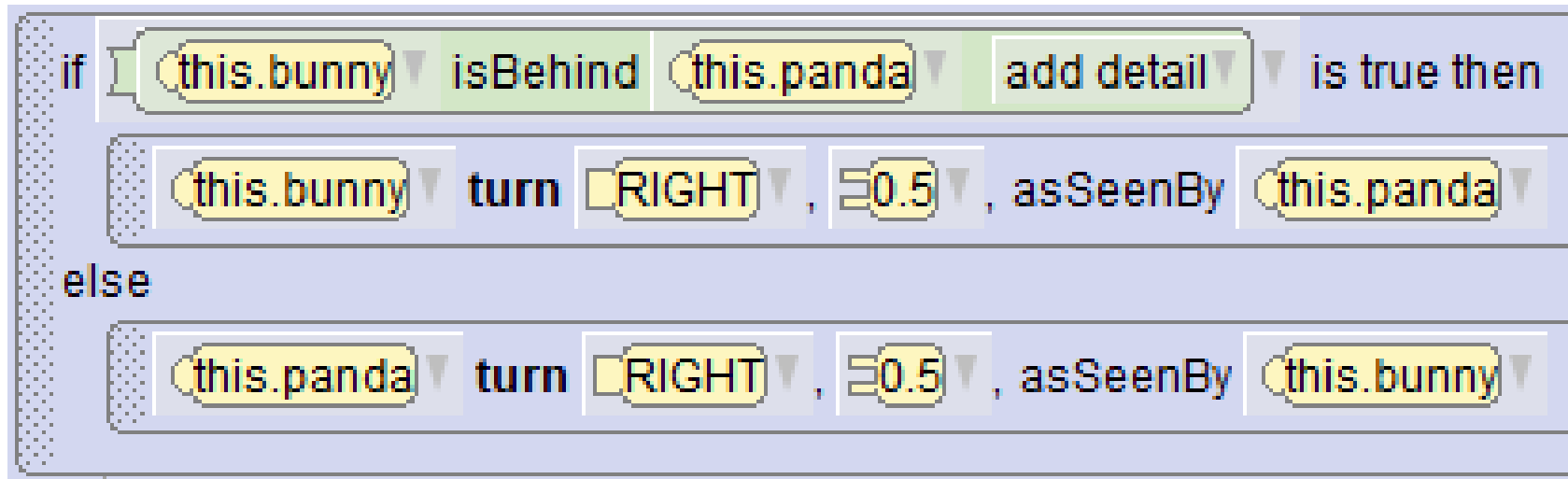
Class Today

- Working with making decisions