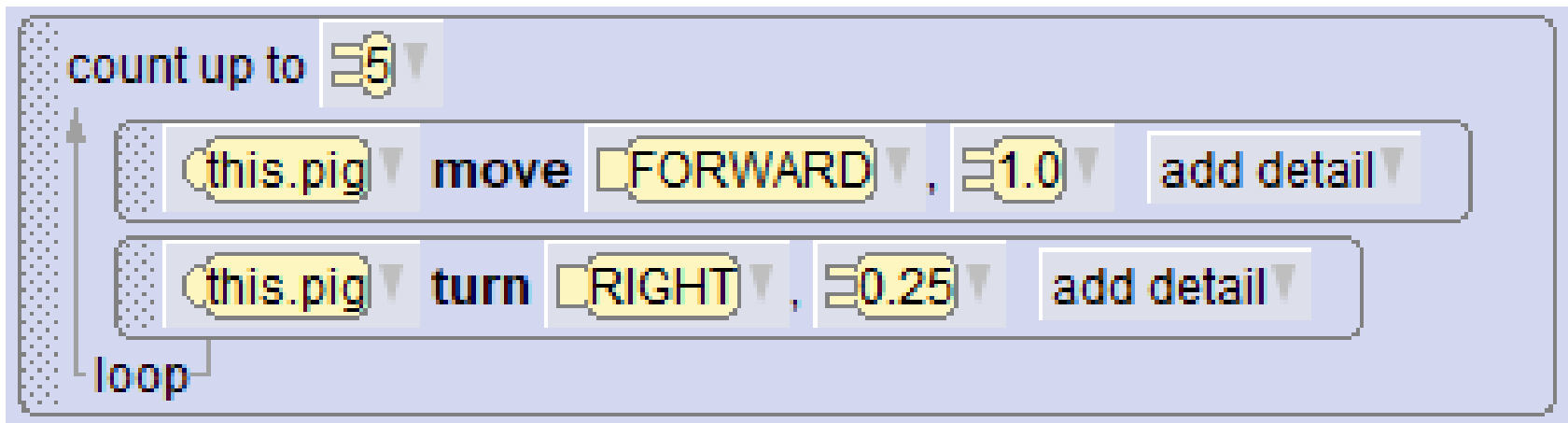


# CompSci 94

## Introduction to Programming Animation and Virtual Worlds

October 12, 2021



Prof. Susan Rodger

# Announcements

- QZ and Videos due before next class

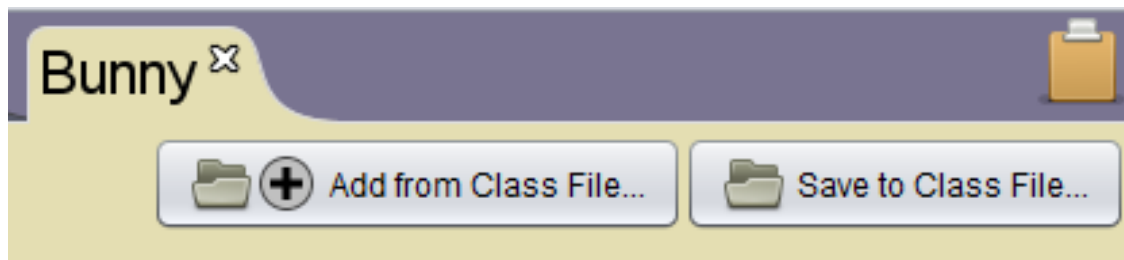
Q1. How do you save an Alice object to read into another project?

# Q1. How do you save an Alice object to read into another project?

- Start with six-sided shape and select the object



- Select “Save to class file”



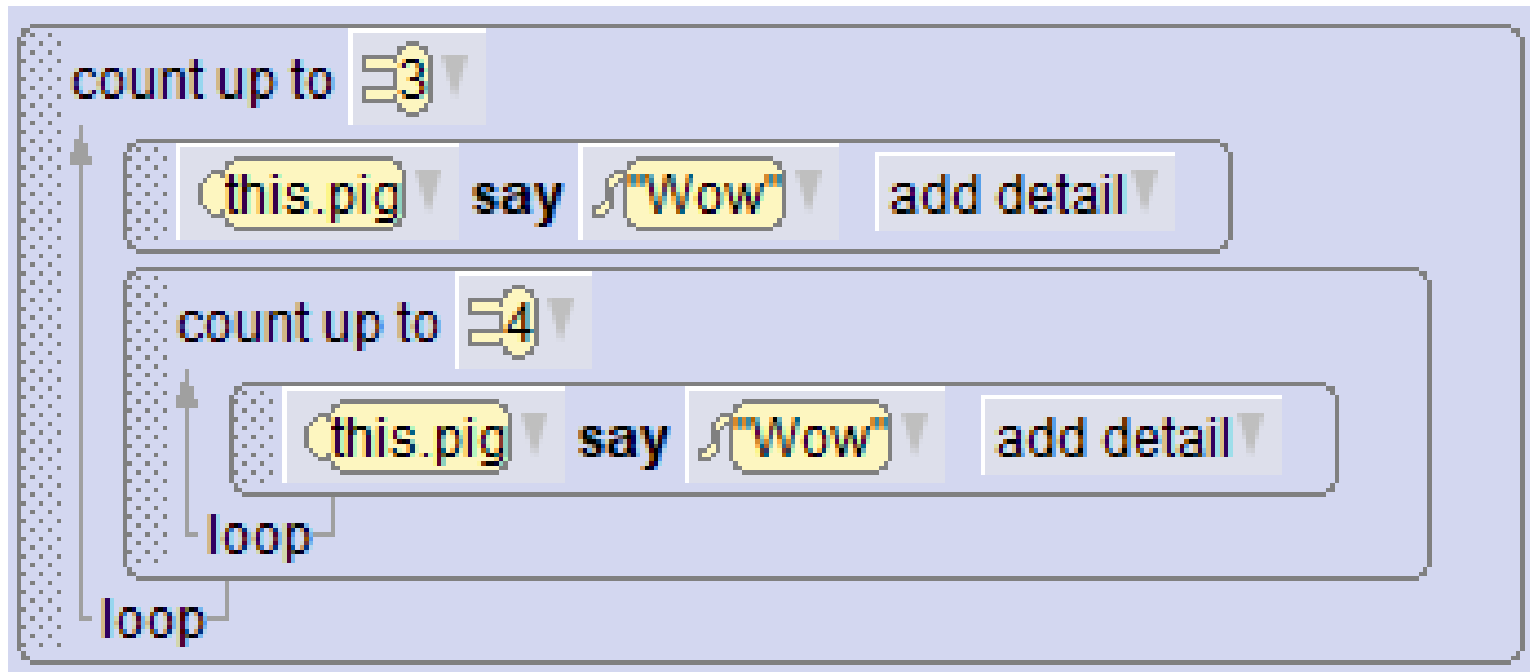
- Give it a different name to distinguish it

Q2. Why would you want to save an object and read it into another Alice program?

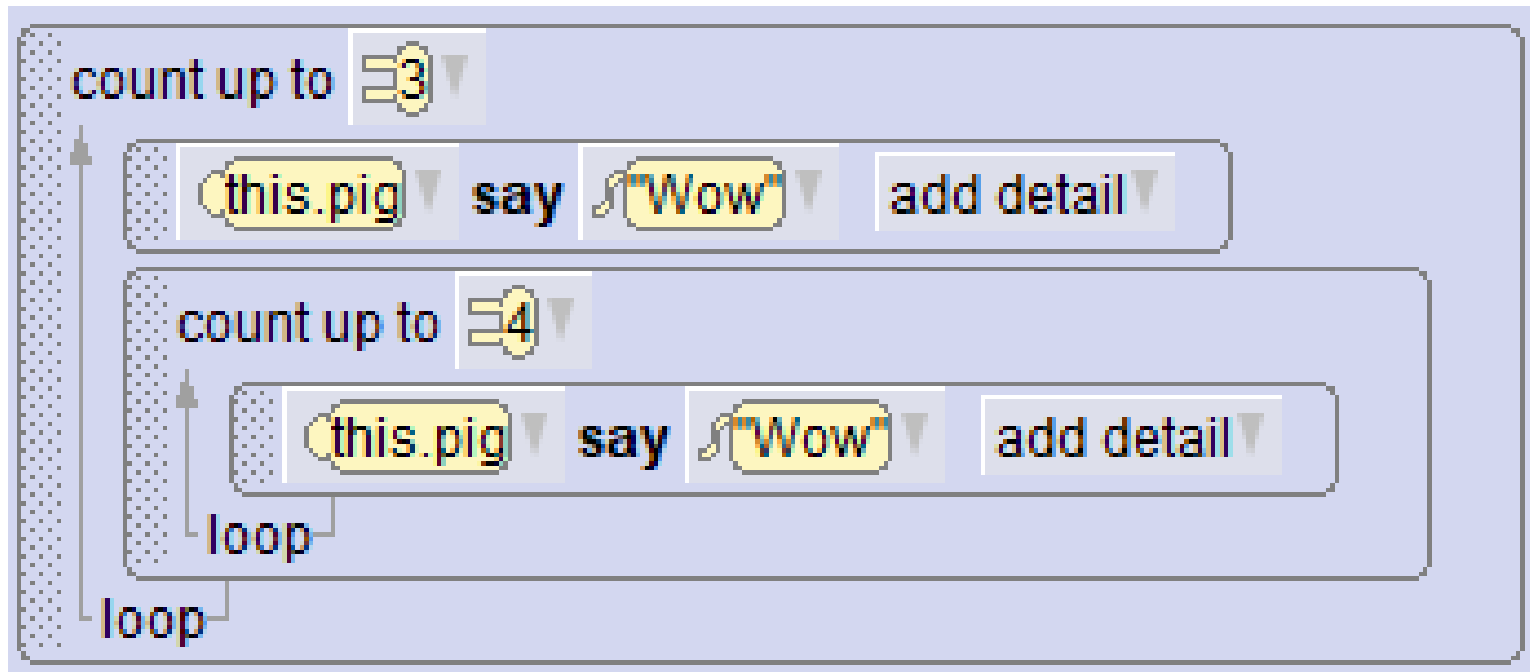
## Q2. Why would you want to save an object and read it into another project?

- Re-use code
  - Bunny already knows how to walk/hop etc.
- What do you need to do to take advantage of this?
  - Write lots of object procedures before saving it out.

# Q3. How many times does the pig say Wow?



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- 15 times total
  - 3 for first say,  $4*3=12$  for second say

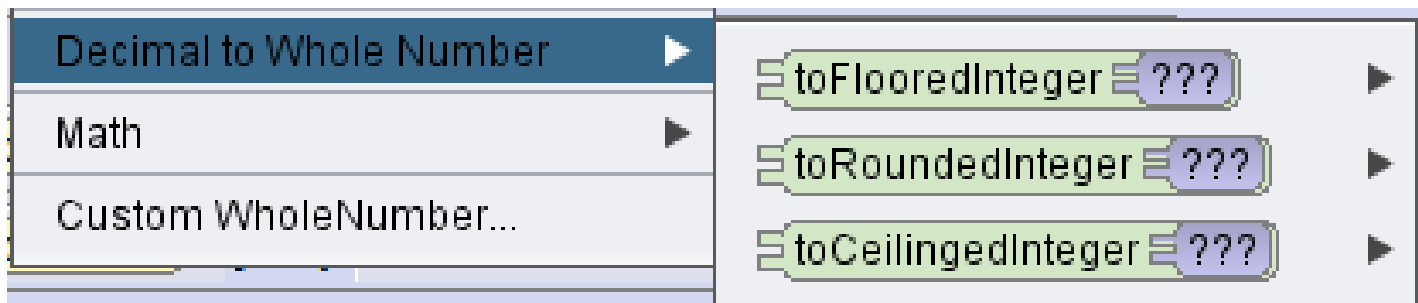


# Q4. Count loop

- What **type** of value can you use for the number for the count loop?
- Suppose you want your object to hop repeatedly towards another object until it stops in front of the object. How do you do that with a count loop?

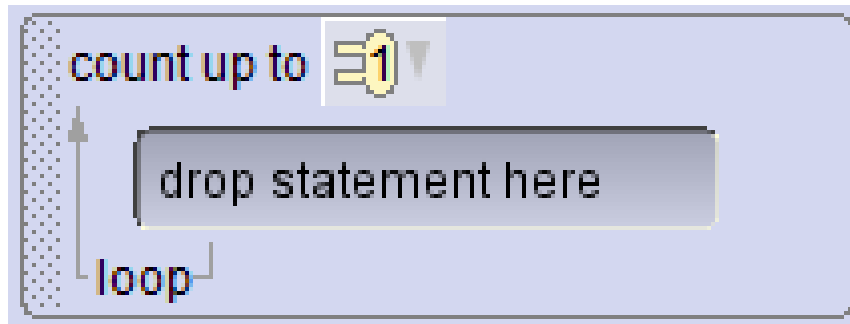
# Q4. Count loop

- What **type** of value can you use for the number for the count loop?
  - Only a whole number
- Suppose you want your object to hop repeatedly until it stops in front of an object. How do you do that with a count loop?
  - Convert the decimal distance into an integer and use that integer



# More detail on Count with function

- First: pick any number

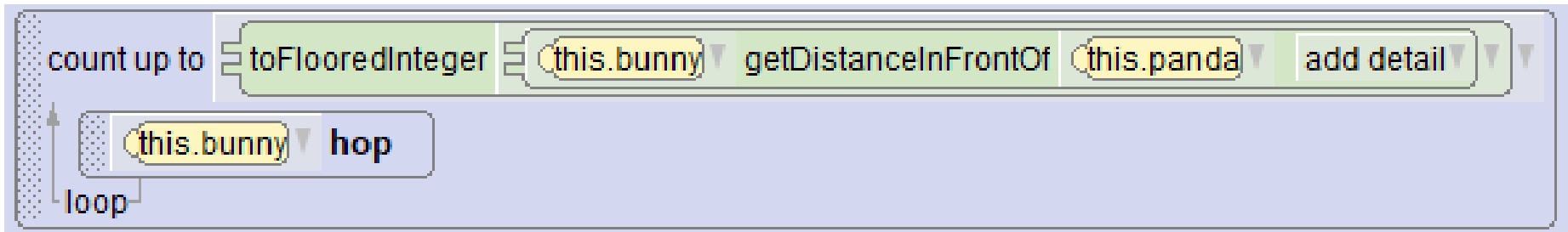


- Second: Decimal to Whole number option



# More detail on Count with function (cont)

- Third: Drop built-in function over decimal number



# More detail on Count with function (cont2)

- All the code (must make sure bunny and panda facing each other in order to use `getDistanceInFrontOf`)

The image shows a Scratch script with the following blocks:

- do together** block containing:
  - `this.bunny` **turnToFace** `this.panda` **add detail**
  - `this.panda` **turnToFace** `this.bunny` **add detail**
- comment** block: `// This assumes one hop is one unit in direction towards the panda`
- count up to** block with `toFlooredInteger` block:
  - Input: `this.bunny` **getDistanceInFrontOf** `this.panda` **add detail**
- loop** block containing:
  - `this.bunny` **hop**

# Class Today

- Create talented bunny – can walk
- Create talented dalmatian – jump with legs stretched
- Save them out and put them in another Alice project

