How and Where does one create an array?

• Create as a Scene Property

  ```
  class Scene extends SScene
  ```

• Go to bottom of page and add there.
Example – Build array of Flyers

• Be sure to check box by “is array”
• Must add Objects into the array

Q1. Arrays

• What is an array?
  – A group of similar objects
  – Examples: All flyers, all decimalNumbers, all SJointedModel

• Why create an array?
  – Can have just one instruction for every item in the array
  – Less code

• Can an object be in more than one array?
  – Yes!
Q2. What is the order the birds do something here?

- Move their wings in this order: Phoenix, chicken, flamingo, penguin, ostrich, then SAME order again.

Q3. What does this code do?

- The birds in array lotsOfBirds turn red one at a time. Then at the same time they all turn blue.
Q4. What does this code do?

Phoenix says greetings one at a time
Then Penguin says the greetings all at once

Q5. What does this code do?

Each bird in the array lotsOfBirds, one at a time, says the phrases in the array greetings, one at a time.
Q6. What does this error mean?

- This name already exists. You must use a different name for each loop!

BE CAREFUL!

- When naming loop variable
  - Don’t use the name of anything else in your program.
    - Don’t use penguin, etc.
    - Use someBird, someBird2, someBird3
- Don’t CUT and PASTE ARRAY LOOP code
  - This can lead to using a variable from the wrong loop. Your Alice code will freeze!
Class Today

- Iterating through Arrays