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- Do you have any questions about the quiz?
- Let's look at some solutions to the interclass problem.

- Alice has a second data structure called an array. Arrays are pretty much just like lists except that they have a fixed length.
- With an array you can only retrieve values or overwrite values.
- The indexes in an array, like those in a list, start at zero.
- There are fewer array operations than list operations.
  - [] - to get an element
  - set - to set an element
  - length – to tell us how many slots on in the array.
- Arrays provide efficient "random access".

- For your project you might want some things to happen a bit differently every time it runs. For this you need random numbers.
- The world has two methods to return pseudo-random boolean and double values. (For our purposes a double is just a number.)

- If you tried to animate your list by giving the objects on your list a walk method you probably found there was a problem. Alice won't let you say item_from_list.walk. This is because item_from_list could be any object in the Alice world and not all objects in Alice have a walk method.
- How then do we animate objects using a list/array in Alice? The partNamed method lets us pull of sub-parts of an object to move for the animation.
- This is more tedious than I would like, but it follows the strong static typing of Java and the lack of subtyping in Alice.

- Is there any part of your project where you might use random numbers? If so, when?
- You can also let me know if you have any questions about lists or arrays.
- Interclass Problem – Do problem 5.5 of 5.7.