

## TWO WAYS TO BUILD A LIST

For this lab you will be given a datatype class called **Person**. You need to implement the methods in two different data structure classes. The two data structure classes you need to implement have the same API (public methods) but the **MyPersonListV1** class will use an **ArrayList<Person>** behind the scenes while the **MyPersonListV2** class will use an array **Person[]** behind the scenes. The specifications are written in the comment above each method.

As you implement these, consider when to make deep copies and how the copy constructor in the **Person** class can help you there. Making deep copies when you don't need to is wasteful, so think carefully about when to use this.

The **StarterTests.java** file contains some examples of JUnit testing for this type of coding problem. You can comment parts out to test things as you develop one class or the other.

Our suggestion is to start by fully implementing the **MyPersonListV1** class and then using what you learned there to implement the **MyPersonListV2** class while also comparing and contrasting the approaches.

This is a "super-sized" lab and as such is (a) going to be started on Monday and finished on Wednesday and (b) going to be worth more points than other labs.