

In this quick lab, you're going to practice using ArrayList's.

1) Create a new project in Eclipse called **ArrayListPractice**. Add a class file called **ArrayListPractice** with a main method. At the top of your class file, type the following:

```
import java.util.ArrayList;
```

That enables you to use ArrayList's in your class file. In every class file you use ArrayList's, you'll have to write that at the top.

2) Create an ArrayList that can hold negative and positive whole numbers (like 2, 5, -6, 8, etc) but not decimals.

3) Using a loop, fill the ArrayList with the numbers in this pattern: 1, 4, 9, 16, ... 100 (this should not be complicated!)

4) Using a **for-each** loop (you may have to look back at your notes!), add up all the numbers in the list and print out your result.

5) Using a **for-each** loop, count how many **even** numbers are in the list and print out your result.

6) Using a **regular for** loop, go through the list and replace all the odd numbers with their opposite (so 1 becomes -1, 9 becomes -9, etc) - why can't you use a for-each loop for this? To make sure your code worked, execute this command:

```
System.out.println(nameOfYourListVariable); //This works for ArrayList's, but not arrays =(
```

7) Using a regular for loop, remove all the numbers whose one's digit (ignoring sign) is less than 5. (The remainder when you divide by 10 is the one's digit of a number - beware of the negatives!) If you print out your list, you should be left with -9, 16, and -49.