**CSC 241**

**Lab 3**

Given an unsorted **ArrayList** of **Integer** values, write a recursive method called **smallestNumber** that will find the smallest number within the **ArrayList**. The approach should use the fact that the smallest number in a subarray of the **ArrayList** is equal to the smaller of the first number in the subarray and the smallest number in the remainder of the subarray. The subarray will always contain the last item in the ArrayList. The method will take one parameter—the starting index of the subarray; it will also return the smallest number found.

Create and test the **smallestNumber** method in a driver program given the following array:

**-3, 5, 1, -9, 8, 16, 10, -4, 5, 2, -1**