1. Create an array list of integers with the following numbers:  
   5 2 8 3 6 7 1 9 4
2. Write a method called linearSearch that receives an arraylist of ints and a value to search for, which in our case is an int. The method will search the arraylist for the value, returns the index if found else returns -1.
3. Test the method in main() for indexes for the following numbers:  
   First: 6

Second: 5

Third: 4

Fourth: 100

1. Answer the following questions:

Which will cause the *longest* execution of a sequential search looking for a value in an array of integers?

* 1. The value is the first one in the array
  2. The value is in the middle of the array
  3. The value is the last one in the array
  4. The value isn't in the array

Which will cause the shortest execution of a sequential search looking for a value in an array of integers?

1. The value is the first one in the array
2. The value is in the middle of the array
3. The value is the last one in the array
4. The value isn't in the array