

Operation	Array	ArrayList
Declare	<code>int[] a;</code>	<code>ArrayList<Integer> a;</code>
Instantiating	<code>a = new int[5];</code>	<code>// Integer is the class version of int a = new ArrayList<Integer>();</code>
add/	<code>// all 5 slots exist</code>	<code>a.add(5);</code>
Assignment	<code>a[2]=3;</code>	<code>// add 5 at index 2, you can't do this // until there is a value at that location a.add(2,5);</code>
Retrieval	<code>x = a[2];</code>	<code>x = a.get(2)</code>
remove	<code>must do manually</code>	<code>a.remove(2) // remove the item at index 2</code>
size	<code>a.length // the size of the full array</code>	<code>a.size() // the # of elements in a</code>

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ArayList<Integer> a= new ArrayList<Integer>();
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a.add(5);
a.add(20);
a.add(33);
a.add(12);
// this will out [5,20,33,12]
System.out.println(a);
a.add(1,15;) // add an item at index 1 (start at 0)
// this will out [5,15,20,33,12]
System.out.println(a);
a.remove(3); // remove the item at index 3 (start at 0)
// this will out [5,15,20,12]
System.out.println(a);
```