**Iterators**

**import java.util.Iterator;**

The **iterator** will help you cycle through the elements of a collection.   
 It may be in only three locations:

1. Before the first element ( at creation )
2. Between two elements
3. After the last elelment

\*\*\*the iterator only moves one direction!!!!

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| **Method Summary** | |
| boolean | [**hasNext**](http://docs.oracle.com/javase/6/docs/api/java/util/Iterator.html#hasNext())()            Returns true if the iteration has more elements. |
| [E](http://docs.oracle.com/javase/6/docs/api/java/util/Iterator.html) | [**next**](http://docs.oracle.com/javase/6/docs/api/java/util/Iterator.html#next())()            Returns the next element in the iteration. |
| void | [**remove**](http://docs.oracle.com/javase/6/docs/api/java/util/Iterator.html#remove())()            Removes from the underlying collection the last element returned by the iterator (optional operation). |

**import java.util.ListIterator;**

\*\*unlike iterators, listiterators may move backwards and forwards.

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| **Method Summary** | |
| void | [**add**](http://docs.oracle.com/javase/6/docs/api/java/util/ListIterator.html#add(E))([E](http://docs.oracle.com/javase/6/docs/api/java/util/ListIterator.html) e)            Inserts the specified element into the list (optional operation). **AT THE CURRENT INDEX** |
| boolean | [**hasNext**](http://docs.oracle.com/javase/6/docs/api/java/util/ListIterator.html#hasNext())()            Returns true if this list iterator has more elements when traversing the list in the forward direction. |
| boolean | [**hasPrevious**](http://docs.oracle.com/javase/6/docs/api/java/util/ListIterator.html#hasPrevious())()            Returns true if this list iterator has more elements when traversing the list in the reverse direction. |
| [E](http://docs.oracle.com/javase/6/docs/api/java/util/ListIterator.html) | [**next**](http://docs.oracle.com/javase/6/docs/api/java/util/ListIterator.html#next())()            Returns the next element in the list. |
| int | [**nextIndex**](http://docs.oracle.com/javase/6/docs/api/java/util/ListIterator.html#nextIndex())()            Returns the index of the element that would be returned by a subsequent call to next. |
| [E](http://docs.oracle.com/javase/6/docs/api/java/util/ListIterator.html) | [**previous**](http://docs.oracle.com/javase/6/docs/api/java/util/ListIterator.html#previous())()            Returns the previous element in the list. |
| int | [**previousIndex**](http://docs.oracle.com/javase/6/docs/api/java/util/ListIterator.html#previousIndex())()            Returns the index of the element that would be returned by a subsequent call to previous. |
| void | [**remove**](http://docs.oracle.com/javase/6/docs/api/java/util/ListIterator.html#remove())()            Removes from the list the last element that was returned by next or previous (optional operation). |
| void | [**set**](http://docs.oracle.com/javase/6/docs/api/java/util/ListIterator.html#set(E))([E](http://docs.oracle.com/javase/6/docs/api/java/util/ListIterator.html) e)            Replaces the last element returned by next or previous with the specified element (optional operation). **AT THE CURRENT INDEX** |