## • Constructor Summary

### Constructors

#### **Constructor and Description**

### ArrayList()

Constructs an empty list with an initial capacity of ten.

### ArrayList (Collection <? extends E> c)

Constructs a list containing the elements of the specified collection, in the order they are returned by the

ArrayList (int initialCapacity)

Constructs an empty list with the specified initial capacity.

# Method Summary

All Methods Instance Methods Concrete Method	lsConcrete Met	stance MethodsConcrete Meth	ods
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Modifier and Type	Method and Description
boolean	$\underline{add}$ ( $\underline{\mathbf{E}}$ e) Appends the specified element to the end of this list.
void	<pre>add(int index, E element) Inserts the specified element at the specified position in this list.</pre>
boolean	<pre>addAll (Collection <? extends E> c) Appends all of the elements in the specified collection to the end of the returned by the specified collection's Iterator.</pre>
boolean	<pre>addAll(int index, Collection<? extends E> c) Inserts all of the elements in the specified collection into this list, sta</pre>
void	<pre>clear() Removes all of the elements from this list.</pre>
<u>Object</u>	<pre>clone() Returns a shallow copy of this ArrayList instance.</pre>

boolean	<pre>contains (Object o) Returns true if this list contains the specified element.</pre>
void	<pre>ensureCapacity (int minCapacity) Increases the capacity of this ArrayList instance, if necessary, to enumber of elements specified by the minimum capacity argument.</pre>
void	<pre>forEach (Consumer <? super E> action) Performs the given action for each element of the Iterable until all action throws an exception.</pre>
E	<pre>get(int index) Returns the element at the specified position in this list.</pre>
int	<pre>indexOf (Object o) Returns the index of the first occurrence of the specified element in t the element.</pre>
boolean	<u>isEmpty</u> () Returns true if this list contains no elements.
<u>Iterator</u> < <u>E</u> >	<u>iterator</u> () Returns an iterator over the elements in this list in proper sequence.
int	lastIndexOf (Object o)  Returns the index of the last occurrence of the specified element in the element.
<u>ListIterator</u> < <u>E</u> >	<u>listIterator</u> () Returns a list iterator over the elements in this list (in proper sequen
<u>ListIterator</u> < <u>E</u> >	<pre>listIterator (int index) Returns a list iterator over the elements in this list (in proper sequenthe list.</pre>
<u>E</u>	<pre>remove (int index) Removes the element at the specified position in this list.</pre>
boolean	remove (Object o)  Removes the first occurrence of the specified element from this list, i
boolean	<pre>removeAll (Collection <?> c)</pre>

	Removes from this list all of its elements that are contained in the sp
boolean	<pre>removeIf(Predicate<? super E> filter)</pre> <pre>Personal of the elements of this collection that satisfy the given predicate</pre>
	Removes all of the elements of this collection that satisfy the given pr
protected void	<pre>removeRange (int fromIndex, int toIndex)</pre>
	Removes from this list all of the elements whose index is between freexclusive.
void	<pre>replaceAll (UnaryOperator<e> operator)</e></pre>
	Replaces each element of this list with the result of applying the oper
boolean	<pre>retainAll (Collection <?> c)</pre>
	Retains only the elements in this list that are contained in the specifi
<u>E</u>	$\underline{\mathtt{set}}$ (int index, $\underline{\mathtt{E}}$ element)
	Replaces the element at the specified position in this list with the spe
int	<pre>size()</pre>
	Returns the number of elements in this list.
void	<pre>sort(Comparator<? super E> c)</pre>
	Sorts this list according to the order induced by the specified Compar
<u>Spliterator</u> < <u>E</u> >	<pre>spliterator()</pre>
	Creates a <u>late-binding</u> and <u>fail-fast</u> Spliterator over the elemen
<u>List</u> < <u>E</u> >	<pre>subList(int fromIndex, int toIndex)</pre>
	Returns a view of the portion of this list between the specified from lexclusive.
Object[]	toArray()
	Returns an array containing all of the elements in this list in proper s
<t> T[]</t>	toArray (T[] a)
	Returns an array containing all of the elements in this list in proper s the runtime type of the returned array is that of the specified array.
void	<pre>trimToSize()</pre>
	Trims the capacity of this ArrayList instance to be the list's curren

Methods inherited from class java.util.<u>AbstractList</u>

equals, hashCode

• Methods inherited from class java.util. AbstractCollection

containsAll, toString

Methods inherited from class java.lang.<u>Object</u>

finalize, getClass, notify, notifyAll, wait, wait, wait

• Methods inherited from interface java.util.List

containsAll, equals, hashCode

• Methods inherited from interface java.util.Collection

parallelStream, stream