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A

[AbstractBagDecorator](http://docs.google.com/org/apache/commons/collections4/bag/AbstractBagDecorator.html)<[E](http://docs.google.com/org/apache/commons/collections4/bag/AbstractBagDecorator.html)> - Class in [org.apache.commons.collections4.bag](http://docs.google.com/org/apache/commons/collections4/bag/package-summary.html)

Decorates another Bag to provide additional behaviour.

[AbstractBagDecorator()](http://docs.google.com/org/apache/commons/collections4/bag/AbstractBagDecorator.html#AbstractBagDecorator--) - Constructor for class org.apache.commons.collections4.bag.[AbstractBagDecorator](http://docs.google.com/org/apache/commons/collections4/bag/AbstractBagDecorator.html)

Constructor only used in deserialization, do not use otherwise.

[AbstractBagDecorator(Bag<E>)](http://docs.google.com/org/apache/commons/collections4/bag/AbstractBagDecorator.html#AbstractBagDecorator-org.apache.commons.collections4.Bag-) - Constructor for class org.apache.commons.collections4.bag.[AbstractBagDecorator](http://docs.google.com/org/apache/commons/collections4/bag/AbstractBagDecorator.html)

Constructor that wraps (not copies).

[AbstractBidiMapDecorator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractBidiMapDecorator.html)<[K](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractBidiMapDecorator.html),[V](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractBidiMapDecorator.html)> - Class in [org.apache.commons.collections4.bidimap](http://docs.google.com/org/apache/commons/collections4/bidimap/package-summary.html)

Provides a base decorator that enables additional functionality to be added to a BidiMap via decoration.

[AbstractBidiMapDecorator(BidiMap<K, V>)](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractBidiMapDecorator.html#AbstractBidiMapDecorator-org.apache.commons.collections4.BidiMap-) - Constructor for class org.apache.commons.collections4.bidimap.[AbstractBidiMapDecorator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractBidiMapDecorator.html)

Constructor that wraps (not copies).

[AbstractBitwiseTrie](http://docs.google.com/org/apache/commons/collections4/trie/AbstractBitwiseTrie.html)<[K](http://docs.google.com/org/apache/commons/collections4/trie/AbstractBitwiseTrie.html),[V](http://docs.google.com/org/apache/commons/collections4/trie/AbstractBitwiseTrie.html)> - Class in [org.apache.commons.collections4.trie](http://docs.google.com/org/apache/commons/collections4/trie/package-summary.html)

This class provides some basic [Trie](http://docs.google.com/org/apache/commons/collections4/Trie.html) functionality and utility methods for actual bitwise [Trie](http://docs.google.com/org/apache/commons/collections4/Trie.html) implementations.

[AbstractBitwiseTrie(KeyAnalyzer<? super K>)](http://docs.google.com/org/apache/commons/collections4/trie/AbstractBitwiseTrie.html#AbstractBitwiseTrie-org.apache.commons.collections4.trie.KeyAnalyzer-) - Constructor for class org.apache.commons.collections4.trie.[AbstractBitwiseTrie](http://docs.google.com/org/apache/commons/collections4/trie/AbstractBitwiseTrie.html)

Constructs a new [Trie](http://docs.google.com/org/apache/commons/collections4/Trie.html) using the given [KeyAnalyzer](http://docs.google.com/org/apache/commons/collections4/trie/KeyAnalyzer.html).

[AbstractCollectionDecorator](http://docs.google.com/org/apache/commons/collections4/collection/AbstractCollectionDecorator.html)<[E](http://docs.google.com/org/apache/commons/collections4/collection/AbstractCollectionDecorator.html)> - Class in [org.apache.commons.collections4.collection](http://docs.google.com/org/apache/commons/collections4/collection/package-summary.html)

Decorates another Collection to provide additional behaviour.

[AbstractCollectionDecorator()](http://docs.google.com/org/apache/commons/collections4/collection/AbstractCollectionDecorator.html#AbstractCollectionDecorator--) - Constructor for class org.apache.commons.collections4.collection.[AbstractCollectionDecorator](http://docs.google.com/org/apache/commons/collections4/collection/AbstractCollectionDecorator.html)

Constructor only used in deserialization, do not use otherwise.

[AbstractCollectionDecorator(Collection<E>)](http://docs.google.com/org/apache/commons/collections4/collection/AbstractCollectionDecorator.html#AbstractCollectionDecorator-java.util.Collection-) - Constructor for class org.apache.commons.collections4.collection.[AbstractCollectionDecorator](http://docs.google.com/org/apache/commons/collections4/collection/AbstractCollectionDecorator.html)

Constructor that wraps (not copies).

[AbstractDualBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html),[V](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html)> - Class in [org.apache.commons.collections4.bidimap](http://docs.google.com/org/apache/commons/collections4/bidimap/package-summary.html)

Abstract [BidiMap](http://docs.google.com/org/apache/commons/collections4/BidiMap.html) implemented using two maps.

[AbstractDualBidiMap()](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html#AbstractDualBidiMap--) - Constructor for class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html)

Creates an empty map, initialised by createMap.

[AbstractDualBidiMap(Map<K, V>, Map<V, K>)](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html#AbstractDualBidiMap-java.util.Map-java.util.Map-) - Constructor for class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html)

Creates an empty map using the two maps specified as storage.

[AbstractDualBidiMap(Map<K, V>, Map<V, K>, BidiMap<V, K>)](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html#AbstractDualBidiMap-java.util.Map-java.util.Map-org.apache.commons.collections4.BidiMap-) - Constructor for class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html)

Constructs a map that decorates the specified maps, used by the subclass createBidiMap implementation.

[AbstractDualBidiMap.BidiMapIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.BidiMapIterator.html)<[K](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.BidiMapIterator.html),[V](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.BidiMapIterator.html)> - Class in [org.apache.commons.collections4.bidimap](http://docs.google.com/org/apache/commons/collections4/bidimap/package-summary.html)

Inner class MapIterator.

[AbstractDualBidiMap.EntrySet](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.EntrySet.html)<[K](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.EntrySet.html),[V](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.EntrySet.html)> - Class in [org.apache.commons.collections4.bidimap](http://docs.google.com/org/apache/commons/collections4/bidimap/package-summary.html)

Inner class EntrySet.

[AbstractDualBidiMap.EntrySetIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.EntrySetIterator.html)<[K](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.EntrySetIterator.html),[V](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.EntrySetIterator.html)> - Class in [org.apache.commons.collections4.bidimap](http://docs.google.com/org/apache/commons/collections4/bidimap/package-summary.html)

Inner class EntrySetIterator.

[AbstractDualBidiMap.KeySet](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.KeySet.html)<[K](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.KeySet.html)> - Class in [org.apache.commons.collections4.bidimap](http://docs.google.com/org/apache/commons/collections4/bidimap/package-summary.html)

Inner class KeySet.

[AbstractDualBidiMap.KeySetIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.KeySetIterator.html)<[K](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.KeySetIterator.html)> - Class in [org.apache.commons.collections4.bidimap](http://docs.google.com/org/apache/commons/collections4/bidimap/package-summary.html)

Inner class KeySetIterator.

[AbstractDualBidiMap.MapEntry](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.MapEntry.html)<[K](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.MapEntry.html),[V](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.MapEntry.html)> - Class in [org.apache.commons.collections4.bidimap](http://docs.google.com/org/apache/commons/collections4/bidimap/package-summary.html)

Inner class MapEntry.

[AbstractDualBidiMap.Values](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.Values.html)<[V](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.Values.html)> - Class in [org.apache.commons.collections4.bidimap](http://docs.google.com/org/apache/commons/collections4/bidimap/package-summary.html)

Inner class Values.

[AbstractDualBidiMap.ValuesIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.ValuesIterator.html)<[V](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.ValuesIterator.html)> - Class in [org.apache.commons.collections4.bidimap](http://docs.google.com/org/apache/commons/collections4/bidimap/package-summary.html)

Inner class ValuesIterator.

[AbstractDualBidiMap.View](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.View.html)<[K](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.View.html),[V](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.View.html),[E](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.View.html)> - Class in [org.apache.commons.collections4.bidimap](http://docs.google.com/org/apache/commons/collections4/bidimap/package-summary.html)

Inner class View.

[AbstractEmptyMapIterator](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractEmptyMapIterator.html)<[K](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractEmptyMapIterator.html),[V](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractEmptyMapIterator.html)> - Class in [org.apache.commons.collections4.iterators](http://docs.google.com/org/apache/commons/collections4/iterators/package-summary.html)

Provides an implementation of an empty map iterator.

[AbstractEmptyMapIterator()](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractEmptyMapIterator.html#AbstractEmptyMapIterator--) - Constructor for class org.apache.commons.collections4.iterators.[AbstractEmptyMapIterator](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractEmptyMapIterator.html)

Create a new AbstractEmptyMapIterator.

[AbstractEntry()](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.AbstractEntry.html#AbstractEntry--) - Constructor for class org.apache.commons.collections4.multiset.[AbstractMultiSet.AbstractEntry](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.AbstractEntry.html)   [AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html),[V](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

An abstract implementation of a hash-based map which provides numerous points for subclasses to override.

[AbstractHashedMap()](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#AbstractHashedMap--) - Constructor for class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Constructor only used in deserialization, do not use otherwise.

[AbstractHashedMap(int, float, int)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#AbstractHashedMap-int-float-int-) - Constructor for class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Constructor which performs no validation on the passed in parameters.

[AbstractHashedMap(int)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#AbstractHashedMap-int-) - Constructor for class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Constructs a new, empty map with the specified initial capacity and default load factor.

[AbstractHashedMap(int, float)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#AbstractHashedMap-int-float-) - Constructor for class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Constructs a new, empty map with the specified initial capacity and load factor.

[AbstractHashedMap(Map<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#AbstractHashedMap-java.util.Map-) - Constructor for class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Constructor copying elements from another map.

[AbstractHashedMap.EntrySet](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.EntrySet.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.EntrySet.html),[V](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.EntrySet.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

EntrySet implementation.

[AbstractHashedMap.EntrySetIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.EntrySetIterator.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.EntrySetIterator.html),[V](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.EntrySetIterator.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

EntrySet iterator.

[AbstractHashedMap.HashEntry](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html),[V](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

HashEntry used to store the data.

[AbstractHashedMap.HashIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashIterator.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashIterator.html),[V](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashIterator.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

Base Iterator

[AbstractHashedMap.HashMapIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashMapIterator.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashMapIterator.html),[V](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashMapIterator.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

MapIterator implementation.

[AbstractHashedMap.KeySet](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySet.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySet.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

KeySet implementation.

[AbstractHashedMap.KeySetIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySetIterator.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySetIterator.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

KeySet iterator.

[AbstractHashedMap.Values](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.Values.html)<[V](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.Values.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

Values implementation.

[AbstractHashedMap.ValuesIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.ValuesIterator.html)<[V](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.ValuesIterator.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

Values iterator.

[AbstractIterableGetMapDecorator](http://docs.google.com/org/apache/commons/collections4/splitmap/AbstractIterableGetMapDecorator.html)<[K](http://docs.google.com/org/apache/commons/collections4/splitmap/AbstractIterableGetMapDecorator.html),[V](http://docs.google.com/org/apache/commons/collections4/splitmap/AbstractIterableGetMapDecorator.html)> - Class in [org.apache.commons.collections4.splitmap](http://docs.google.com/org/apache/commons/collections4/splitmap/package-summary.html)

[IterableGet](http://docs.google.com/org/apache/commons/collections4/IterableGet.html) that uses a [Map](https://docs.oracle.com/javase/7/docs/api/java/util/Map.html?is-external=true)<K, V> for the [Get](http://docs.google.com/org/apache/commons/collections4/Get.html)<K, V> implementation.

[AbstractIterableGetMapDecorator(Map<K, V>)](http://docs.google.com/org/apache/commons/collections4/splitmap/AbstractIterableGetMapDecorator.html#AbstractIterableGetMapDecorator-java.util.Map-) - Constructor for class org.apache.commons.collections4.splitmap.[AbstractIterableGetMapDecorator](http://docs.google.com/org/apache/commons/collections4/splitmap/AbstractIterableGetMapDecorator.html)

Create a new AbstractSplitMapDecorator.

[AbstractIterableGetMapDecorator()](http://docs.google.com/org/apache/commons/collections4/splitmap/AbstractIterableGetMapDecorator.html#AbstractIterableGetMapDecorator--) - Constructor for class org.apache.commons.collections4.splitmap.[AbstractIterableGetMapDecorator](http://docs.google.com/org/apache/commons/collections4/splitmap/AbstractIterableGetMapDecorator.html)

Constructor only used in deserialization, do not use otherwise.

[AbstractIterableMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractIterableMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractIterableMap.html),[V](http://docs.google.com/org/apache/commons/collections4/map/AbstractIterableMap.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

Provide a basic [IterableMap](http://docs.google.com/org/apache/commons/collections4/IterableMap.html) implementation.

[AbstractIterableMap()](http://docs.google.com/org/apache/commons/collections4/map/AbstractIterableMap.html#AbstractIterableMap--) - Constructor for class org.apache.commons.collections4.map.[AbstractIterableMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractIterableMap.html)   [AbstractIteratorDecorator](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractIteratorDecorator.html)<[E](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractIteratorDecorator.html)> - Class in [org.apache.commons.collections4.iterators](http://docs.google.com/org/apache/commons/collections4/iterators/package-summary.html)

Provides basic behaviour for decorating an iterator with extra functionality.

[AbstractIteratorDecorator(Iterator<E>)](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractIteratorDecorator.html#AbstractIteratorDecorator-java.util.Iterator-) - Constructor for class org.apache.commons.collections4.iterators.[AbstractIteratorDecorator](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractIteratorDecorator.html)

Constructor that decorates the specified iterator.

[AbstractKeyValue](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractKeyValue.html)<[K](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractKeyValue.html),[V](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractKeyValue.html)> - Class in [org.apache.commons.collections4.keyvalue](http://docs.google.com/org/apache/commons/collections4/keyvalue/package-summary.html)

Abstract pair class to assist with creating KeyValue and [Map.Entry](https://docs.oracle.com/javase/7/docs/api/java/util/Map.Entry.html?is-external=true) implementations.

[AbstractKeyValue(K, V)](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractKeyValue.html#AbstractKeyValue-K-V-) - Constructor for class org.apache.commons.collections4.keyvalue.[AbstractKeyValue](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractKeyValue.html)

Constructs a new pair with the specified key and given value.

[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)<[E](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)> - Class in [org.apache.commons.collections4.list](http://docs.google.com/org/apache/commons/collections4/list/package-summary.html)

An abstract implementation of a linked list which provides numerous points for subclasses to override.

[AbstractLinkedList()](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#AbstractLinkedList--) - Constructor for class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)

Constructor that does nothing intended for deserialization.

[AbstractLinkedList(Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#AbstractLinkedList-java.util.Collection-) - Constructor for class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)

Constructs a list copying data from the specified collection.

[AbstractLinkedList.LinkedListIterator](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedListIterator.html)<[E](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedListIterator.html)> - Class in [org.apache.commons.collections4.list](http://docs.google.com/org/apache/commons/collections4/list/package-summary.html)

A list iterator over the linked list.

[AbstractLinkedList.LinkedSubList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedSubList.html)<[E](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedSubList.html)> - Class in [org.apache.commons.collections4.list](http://docs.google.com/org/apache/commons/collections4/list/package-summary.html)

The sublist implementation for AbstractLinkedList.

[AbstractLinkedList.LinkedSubListIterator](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedSubListIterator.html)<[E](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedSubListIterator.html)> - Class in [org.apache.commons.collections4.list](http://docs.google.com/org/apache/commons/collections4/list/package-summary.html)

A list iterator over the linked sub list.

[AbstractLinkedList.Node](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.Node.html)<[E](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.Node.html)> - Class in [org.apache.commons.collections4.list](http://docs.google.com/org/apache/commons/collections4/list/package-summary.html)

A node within the linked list.

[AbstractLinkedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html),[V](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

An abstract implementation of a hash-based map that links entries to create an ordered map and which provides numerous points for subclasses to override.

[AbstractLinkedMap()](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html#AbstractLinkedMap--) - Constructor for class org.apache.commons.collections4.map.[AbstractLinkedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html)

Constructor only used in deserialization, do not use otherwise.

[AbstractLinkedMap(int, float, int)](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html#AbstractLinkedMap-int-float-int-) - Constructor for class org.apache.commons.collections4.map.[AbstractLinkedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html)

Constructor which performs no validation on the passed in parameters.

[AbstractLinkedMap(int)](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html#AbstractLinkedMap-int-) - Constructor for class org.apache.commons.collections4.map.[AbstractLinkedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html)

Constructs a new, empty map with the specified initial capacity.

[AbstractLinkedMap(int, float)](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html#AbstractLinkedMap-int-float-) - Constructor for class org.apache.commons.collections4.map.[AbstractLinkedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html)

Constructs a new, empty map with the specified initial capacity and load factor.

[AbstractLinkedMap(Map<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html#AbstractLinkedMap-java.util.Map-) - Constructor for class org.apache.commons.collections4.map.[AbstractLinkedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html)

Constructor copying elements from another map.

[AbstractLinkedMap.EntrySetIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.EntrySetIterator.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.EntrySetIterator.html),[V](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.EntrySetIterator.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

EntrySet iterator.

[AbstractLinkedMap.KeySetIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.KeySetIterator.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.KeySetIterator.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

KeySet iterator.

[AbstractLinkedMap.LinkEntry](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkEntry.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkEntry.html),[V](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkEntry.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

LinkEntry that stores the data.

[AbstractLinkedMap.LinkIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkIterator.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkIterator.html),[V](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkIterator.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

Base Iterator that iterates in link order.

[AbstractLinkedMap.LinkMapIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkMapIterator.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkMapIterator.html),[V](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkMapIterator.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

MapIterator implementation.

[AbstractLinkedMap.ValuesIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.ValuesIterator.html)<[V](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.ValuesIterator.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

Values iterator.

[AbstractListDecorator](http://docs.google.com/org/apache/commons/collections4/list/AbstractListDecorator.html)<[E](http://docs.google.com/org/apache/commons/collections4/list/AbstractListDecorator.html)> - Class in [org.apache.commons.collections4.list](http://docs.google.com/org/apache/commons/collections4/list/package-summary.html)

Decorates another [List](https://docs.oracle.com/javase/7/docs/api/java/util/List.html?is-external=true) to provide additional behaviour.

[AbstractListDecorator()](http://docs.google.com/org/apache/commons/collections4/list/AbstractListDecorator.html#AbstractListDecorator--) - Constructor for class org.apache.commons.collections4.list.[AbstractListDecorator](http://docs.google.com/org/apache/commons/collections4/list/AbstractListDecorator.html)

Constructor only used in deserialization, do not use otherwise.

[AbstractListDecorator(List<E>)](http://docs.google.com/org/apache/commons/collections4/list/AbstractListDecorator.html#AbstractListDecorator-java.util.List-) - Constructor for class org.apache.commons.collections4.list.[AbstractListDecorator](http://docs.google.com/org/apache/commons/collections4/list/AbstractListDecorator.html)

Constructor that wraps (not copies).

[AbstractListIteratorDecorator](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractListIteratorDecorator.html)<[E](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractListIteratorDecorator.html)> - Class in [org.apache.commons.collections4.iterators](http://docs.google.com/org/apache/commons/collections4/iterators/package-summary.html)

Provides basic behaviour for decorating a list iterator with extra functionality.

[AbstractListIteratorDecorator(ListIterator<E>)](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractListIteratorDecorator.html#AbstractListIteratorDecorator-java.util.ListIterator-) - Constructor for class org.apache.commons.collections4.iterators.[AbstractListIteratorDecorator](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractListIteratorDecorator.html)

Constructor that decorates the specified iterator.

[AbstractListValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractListValuedMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractListValuedMap.html),[V](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractListValuedMap.html)> - Class in [org.apache.commons.collections4.multimap](http://docs.google.com/org/apache/commons/collections4/multimap/package-summary.html)

Abstract implementation of the [ListValuedMap](http://docs.google.com/org/apache/commons/collections4/ListValuedMap.html) interface to simplify the creation of subclass implementations.

[AbstractListValuedMap()](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractListValuedMap.html#AbstractListValuedMap--) - Constructor for class org.apache.commons.collections4.multimap.[AbstractListValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractListValuedMap.html)

Constructor needed for subclass serialisation.

[AbstractListValuedMap(Map<K, ? extends List<V>>)](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractListValuedMap.html#AbstractListValuedMap-java.util.Map-) - Constructor for class org.apache.commons.collections4.multimap.[AbstractListValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractListValuedMap.html)

A constructor that wraps, not copies

[AbstractMapBag](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html)<[E](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html)> - Class in [org.apache.commons.collections4.bag](http://docs.google.com/org/apache/commons/collections4/bag/package-summary.html)

Abstract implementation of the [Bag](http://docs.google.com/org/apache/commons/collections4/Bag.html) interface to simplify the creation of subclass implementations.

[AbstractMapBag()](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html#AbstractMapBag--) - Constructor for class org.apache.commons.collections4.bag.[AbstractMapBag](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html)

Constructor needed for subclass serialisation.

[AbstractMapBag(Map<E, AbstractMapBag.MutableInteger>)](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html#AbstractMapBag-java.util.Map-) - Constructor for class org.apache.commons.collections4.bag.[AbstractMapBag](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html)

Constructor that assigns the specified Map as the backing store.

[AbstractMapBag.MutableInteger](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.MutableInteger.html) - Class in [org.apache.commons.collections4.bag](http://docs.google.com/org/apache/commons/collections4/bag/package-summary.html)

Mutable integer class for storing the data.

[AbstractMapDecorator](http://docs.google.com/org/apache/commons/collections4/map/AbstractMapDecorator.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractMapDecorator.html),[V](http://docs.google.com/org/apache/commons/collections4/map/AbstractMapDecorator.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

Provides a base decorator that enables additional functionality to be added to a Map via decoration.

[AbstractMapDecorator()](http://docs.google.com/org/apache/commons/collections4/map/AbstractMapDecorator.html#AbstractMapDecorator--) - Constructor for class org.apache.commons.collections4.map.[AbstractMapDecorator](http://docs.google.com/org/apache/commons/collections4/map/AbstractMapDecorator.html)

Constructor only used in deserialization, do not use otherwise.

[AbstractMapDecorator(Map<K, V>)](http://docs.google.com/org/apache/commons/collections4/map/AbstractMapDecorator.html#AbstractMapDecorator-java.util.Map-) - Constructor for class org.apache.commons.collections4.map.[AbstractMapDecorator](http://docs.google.com/org/apache/commons/collections4/map/AbstractMapDecorator.html)

Constructor that wraps (not copies).

[AbstractMapEntry](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractMapEntry.html)<[K](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractMapEntry.html),[V](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractMapEntry.html)> - Class in [org.apache.commons.collections4.keyvalue](http://docs.google.com/org/apache/commons/collections4/keyvalue/package-summary.html)

Abstract Pair class to assist with creating correct [Map.Entry](https://docs.oracle.com/javase/7/docs/api/java/util/Map.Entry.html?is-external=true) implementations.

[AbstractMapEntry(K, V)](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractMapEntry.html#AbstractMapEntry-K-V-) - Constructor for class org.apache.commons.collections4.keyvalue.[AbstractMapEntry](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractMapEntry.html)

Constructs a new entry with the given key and given value.

[AbstractMapEntryDecorator](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractMapEntryDecorator.html)<[K](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractMapEntryDecorator.html),[V](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractMapEntryDecorator.html)> - Class in [org.apache.commons.collections4.keyvalue](http://docs.google.com/org/apache/commons/collections4/keyvalue/package-summary.html)

Provides a base decorator that allows additional functionality to be added to a [Map.Entry](https://docs.oracle.com/javase/7/docs/api/java/util/Map.Entry.html?is-external=true).

[AbstractMapEntryDecorator(Map.Entry<K, V>)](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractMapEntryDecorator.html#AbstractMapEntryDecorator-java.util.Map.Entry-) - Constructor for class org.apache.commons.collections4.keyvalue.[AbstractMapEntryDecorator](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractMapEntryDecorator.html)

Constructor that wraps (not copies).

[AbstractMapIteratorDecorator](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractMapIteratorDecorator.html)<[K](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractMapIteratorDecorator.html),[V](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractMapIteratorDecorator.html)> - Class in [org.apache.commons.collections4.iterators](http://docs.google.com/org/apache/commons/collections4/iterators/package-summary.html)

Provides basic behaviour for decorating a map iterator with extra functionality.

[AbstractMapIteratorDecorator(MapIterator<K, V>)](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractMapIteratorDecorator.html#AbstractMapIteratorDecorator-org.apache.commons.collections4.MapIterator-) - Constructor for class org.apache.commons.collections4.iterators.[AbstractMapIteratorDecorator](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractMapIteratorDecorator.html)

Constructor that decorates the specified iterator.

[AbstractMapMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.html)<[E](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.html)> - Class in [org.apache.commons.collections4.multiset](http://docs.google.com/org/apache/commons/collections4/multiset/package-summary.html)

Abstract implementation of the [MultiSet](http://docs.google.com/org/apache/commons/collections4/MultiSet.html) interface to simplify the creation of subclass implementations.

[AbstractMapMultiSet()](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.html#AbstractMapMultiSet--) - Constructor for class org.apache.commons.collections4.multiset.[AbstractMapMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.html)

Constructor needed for subclass serialisation.

[AbstractMapMultiSet(Map<E, AbstractMapMultiSet.MutableInteger>)](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.html#AbstractMapMultiSet-java.util.Map-) - Constructor for class org.apache.commons.collections4.multiset.[AbstractMapMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.html)

Constructor that assigns the specified Map as the backing store.

[AbstractMapMultiSet.EntrySetIterator](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.EntrySetIterator.html)<[E](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.EntrySetIterator.html)> - Class in [org.apache.commons.collections4.multiset](http://docs.google.com/org/apache/commons/collections4/multiset/package-summary.html)

Inner class EntrySetIterator.

[AbstractMapMultiSet.MultiSetEntry](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.MultiSetEntry.html)<[E](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.MultiSetEntry.html)> - Class in [org.apache.commons.collections4.multiset](http://docs.google.com/org/apache/commons/collections4/multiset/package-summary.html)

Inner class MultiSetEntry.

[AbstractMapMultiSet.MutableInteger](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.MutableInteger.html) - Class in [org.apache.commons.collections4.multiset](http://docs.google.com/org/apache/commons/collections4/multiset/package-summary.html)

Mutable integer class for storing the data.

[AbstractMapMultiSet.UniqueSetIterator](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.UniqueSetIterator.html)<[E](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.UniqueSetIterator.html)> - Class in [org.apache.commons.collections4.multiset](http://docs.google.com/org/apache/commons/collections4/multiset/package-summary.html)

Inner class UniqueSetIterator.

[AbstractMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html)<[E](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html)> - Class in [org.apache.commons.collections4.multiset](http://docs.google.com/org/apache/commons/collections4/multiset/package-summary.html)

Abstract implementation of the [MultiSet](http://docs.google.com/org/apache/commons/collections4/MultiSet.html) interface to simplify the creation of subclass implementations.

[AbstractMultiSet()](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html#AbstractMultiSet--) - Constructor for class org.apache.commons.collections4.multiset.[AbstractMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html)

Constructor needed for subclass serialisation.

[AbstractMultiSet.AbstractEntry](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.AbstractEntry.html)<[E](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.AbstractEntry.html)> - Class in [org.apache.commons.collections4.multiset](http://docs.google.com/org/apache/commons/collections4/multiset/package-summary.html)

Inner class AbstractEntry.

[AbstractMultiSet.EntrySet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.EntrySet.html)<[E](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.EntrySet.html)> - Class in [org.apache.commons.collections4.multiset](http://docs.google.com/org/apache/commons/collections4/multiset/package-summary.html)

Inner class EntrySet.

[AbstractMultiSet.UniqueSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.UniqueSet.html)<[E](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.UniqueSet.html)> - Class in [org.apache.commons.collections4.multiset](http://docs.google.com/org/apache/commons/collections4/multiset/package-summary.html)

Inner class UniqueSet.

[AbstractMultiSetDecorator](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSetDecorator.html)<[E](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSetDecorator.html)> - Class in [org.apache.commons.collections4.multiset](http://docs.google.com/org/apache/commons/collections4/multiset/package-summary.html)

Decorates another MultSet to provide additional behaviour.

[AbstractMultiSetDecorator()](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSetDecorator.html#AbstractMultiSetDecorator--) - Constructor for class org.apache.commons.collections4.multiset.[AbstractMultiSetDecorator](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSetDecorator.html)

Constructor only used in deserialization, do not use otherwise.

[AbstractMultiSetDecorator(MultiSet<E>)](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSetDecorator.html#AbstractMultiSetDecorator-org.apache.commons.collections4.MultiSet-) - Constructor for class org.apache.commons.collections4.multiset.[AbstractMultiSetDecorator](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSetDecorator.html)

Constructor that wraps (not copies).

[AbstractMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html),[V](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html)> - Class in [org.apache.commons.collections4.multimap](http://docs.google.com/org/apache/commons/collections4/multimap/package-summary.html)

Abstract implementation of the [MultiValuedMap](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html) interface to simplify the creation of subclass implementations.

[AbstractMultiValuedMap()](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html#AbstractMultiValuedMap--) - Constructor for class org.apache.commons.collections4.multimap.[AbstractMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html)

Constructor needed for subclass serialisation.

[AbstractMultiValuedMap(Map<K, ? extends Collection<V>>)](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html#AbstractMultiValuedMap-java.util.Map-) - Constructor for class org.apache.commons.collections4.multimap.[AbstractMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html)

Constructor that wraps (not copies).

[AbstractMultiValuedMapDecorator](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html)<[K](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html),[V](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html)> - Class in [org.apache.commons.collections4.multimap](http://docs.google.com/org/apache/commons/collections4/multimap/package-summary.html)

Decorates another MultiValuedMap to provide additional behaviour.

[AbstractMultiValuedMapDecorator(MultiValuedMap<K, V>)](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html#AbstractMultiValuedMapDecorator-org.apache.commons.collections4.MultiValuedMap-) - Constructor for class org.apache.commons.collections4.multimap.[AbstractMultiValuedMapDecorator](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html)

Constructor that wraps (not copies).

[AbstractNavigableSetDecorator](http://docs.google.com/org/apache/commons/collections4/set/AbstractNavigableSetDecorator.html)<[E](http://docs.google.com/org/apache/commons/collections4/set/AbstractNavigableSetDecorator.html)> - Class in [org.apache.commons.collections4.set](http://docs.google.com/org/apache/commons/collections4/set/package-summary.html)

Decorates another NavigableSet to provide additional behaviour.

[AbstractNavigableSetDecorator()](http://docs.google.com/org/apache/commons/collections4/set/AbstractNavigableSetDecorator.html#AbstractNavigableSetDecorator--) - Constructor for class org.apache.commons.collections4.set.[AbstractNavigableSetDecorator](http://docs.google.com/org/apache/commons/collections4/set/AbstractNavigableSetDecorator.html)

Constructor only used in deserialization, do not use otherwise.

[AbstractNavigableSetDecorator(NavigableSet<E>)](http://docs.google.com/org/apache/commons/collections4/set/AbstractNavigableSetDecorator.html#AbstractNavigableSetDecorator-java.util.NavigableSet-) - Constructor for class org.apache.commons.collections4.set.[AbstractNavigableSetDecorator](http://docs.google.com/org/apache/commons/collections4/set/AbstractNavigableSetDecorator.html)

Constructor that wraps (not copies).

[AbstractOrderedBidiMapDecorator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractOrderedBidiMapDecorator.html)<[K](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractOrderedBidiMapDecorator.html),[V](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractOrderedBidiMapDecorator.html)> - Class in [org.apache.commons.collections4.bidimap](http://docs.google.com/org/apache/commons/collections4/bidimap/package-summary.html)

Provides a base decorator that enables additional functionality to be added to an OrderedBidiMap via decoration.

[AbstractOrderedBidiMapDecorator(OrderedBidiMap<K, V>)](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractOrderedBidiMapDecorator.html#AbstractOrderedBidiMapDecorator-org.apache.commons.collections4.OrderedBidiMap-) - Constructor for class org.apache.commons.collections4.bidimap.[AbstractOrderedBidiMapDecorator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractOrderedBidiMapDecorator.html)

Constructor that wraps (not copies).

[AbstractOrderedMapDecorator](http://docs.google.com/org/apache/commons/collections4/map/AbstractOrderedMapDecorator.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractOrderedMapDecorator.html),[V](http://docs.google.com/org/apache/commons/collections4/map/AbstractOrderedMapDecorator.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

Provides a base decorator that enables additional functionality to be added to an OrderedMap via decoration.

[AbstractOrderedMapDecorator()](http://docs.google.com/org/apache/commons/collections4/map/AbstractOrderedMapDecorator.html#AbstractOrderedMapDecorator--) - Constructor for class org.apache.commons.collections4.map.[AbstractOrderedMapDecorator](http://docs.google.com/org/apache/commons/collections4/map/AbstractOrderedMapDecorator.html)

Constructor only used in deserialization, do not use otherwise.

[AbstractOrderedMapDecorator(OrderedMap<K, V>)](http://docs.google.com/org/apache/commons/collections4/map/AbstractOrderedMapDecorator.html#AbstractOrderedMapDecorator-org.apache.commons.collections4.OrderedMap-) - Constructor for class org.apache.commons.collections4.map.[AbstractOrderedMapDecorator](http://docs.google.com/org/apache/commons/collections4/map/AbstractOrderedMapDecorator.html)

Constructor that wraps (not copies).

[AbstractOrderedMapIteratorDecorator](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractOrderedMapIteratorDecorator.html)<[K](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractOrderedMapIteratorDecorator.html),[V](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractOrderedMapIteratorDecorator.html)> - Class in [org.apache.commons.collections4.iterators](http://docs.google.com/org/apache/commons/collections4/iterators/package-summary.html)

Provides basic behaviour for decorating an ordered map iterator with extra functionality.

[AbstractOrderedMapIteratorDecorator(OrderedMapIterator<K, V>)](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractOrderedMapIteratorDecorator.html#AbstractOrderedMapIteratorDecorator-org.apache.commons.collections4.OrderedMapIterator-) - Constructor for class org.apache.commons.collections4.iterators.[AbstractOrderedMapIteratorDecorator](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractOrderedMapIteratorDecorator.html)

Constructor that decorates the specified iterator.

[AbstractPropertiesFactory](http://docs.google.com/org/apache/commons/collections4/properties/AbstractPropertiesFactory.html)<[T](http://docs.google.com/org/apache/commons/collections4/properties/AbstractPropertiesFactory.html) extends [Properties](https://docs.oracle.com/javase/7/docs/api/java/util/Properties.html?is-external=true)> - Class in [org.apache.commons.collections4.properties](http://docs.google.com/org/apache/commons/collections4/properties/package-summary.html)

Subclasses create and load [Properties](https://docs.oracle.com/javase/7/docs/api/java/util/Properties.html?is-external=true) and subclasses of [Properties](https://docs.oracle.com/javase/7/docs/api/java/util/Properties.html?is-external=true) like [SortedProperties](http://docs.google.com/org/apache/commons/collections4/properties/SortedProperties.html).

[AbstractPropertiesFactory()](http://docs.google.com/org/apache/commons/collections4/properties/AbstractPropertiesFactory.html#AbstractPropertiesFactory--) - Constructor for class org.apache.commons.collections4.properties.[AbstractPropertiesFactory](http://docs.google.com/org/apache/commons/collections4/properties/AbstractPropertiesFactory.html)

Constructs an instance.

[AbstractQuantifierPredicate](http://docs.google.com/org/apache/commons/collections4/functors/AbstractQuantifierPredicate.html)<[T](http://docs.google.com/org/apache/commons/collections4/functors/AbstractQuantifierPredicate.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Abstract base class for quantification predicates, e.g.

[AbstractQuantifierPredicate(Predicate<? super T>...)](http://docs.google.com/org/apache/commons/collections4/functors/AbstractQuantifierPredicate.html#AbstractQuantifierPredicate-org.apache.commons.collections4.Predicate...-) - Constructor for class org.apache.commons.collections4.functors.[AbstractQuantifierPredicate](http://docs.google.com/org/apache/commons/collections4/functors/AbstractQuantifierPredicate.html)

Constructor that performs no validation.

[AbstractQueueDecorator](http://docs.google.com/org/apache/commons/collections4/queue/AbstractQueueDecorator.html)<[E](http://docs.google.com/org/apache/commons/collections4/queue/AbstractQueueDecorator.html)> - Class in [org.apache.commons.collections4.queue](http://docs.google.com/org/apache/commons/collections4/queue/package-summary.html)

Decorates another [Queue](https://docs.oracle.com/javase/7/docs/api/java/util/Queue.html?is-external=true) to provide additional behaviour.

[AbstractQueueDecorator()](http://docs.google.com/org/apache/commons/collections4/queue/AbstractQueueDecorator.html#AbstractQueueDecorator--) - Constructor for class org.apache.commons.collections4.queue.[AbstractQueueDecorator](http://docs.google.com/org/apache/commons/collections4/queue/AbstractQueueDecorator.html)

Constructor only used in deserialization, do not use otherwise.

[AbstractQueueDecorator(Queue<E>)](http://docs.google.com/org/apache/commons/collections4/queue/AbstractQueueDecorator.html#AbstractQueueDecorator-java.util.Queue-) - Constructor for class org.apache.commons.collections4.queue.[AbstractQueueDecorator](http://docs.google.com/org/apache/commons/collections4/queue/AbstractQueueDecorator.html)

Constructor that wraps (not copies).

[AbstractReferenceMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html),[V](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

An abstract implementation of a hash-based map that allows the entries to be removed by the garbage collector.

[AbstractReferenceMap()](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html#AbstractReferenceMap--) - Constructor for class org.apache.commons.collections4.map.[AbstractReferenceMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html)

Constructor used during deserialization.

[AbstractReferenceMap(AbstractReferenceMap.ReferenceStrength, AbstractReferenceMap.ReferenceStrength, int, float, boolean)](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html#AbstractReferenceMap-org.apache.commons.collections4.map.AbstractReferenceMap.ReferenceStrength-org.apache.commons.collections4.map.AbstractReferenceMap.ReferenceStrength-int-float-boolean-) - Constructor for class org.apache.commons.collections4.map.[AbstractReferenceMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html)

Constructs a new empty map with the specified reference types, load factor and initial capacity.

[AbstractReferenceMap.ReferenceEntry](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html),[V](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

A MapEntry implementation for the map.

[AbstractReferenceMap.ReferenceStrength](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceStrength.html) - Enum in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

Reference type enum.

[AbstractSerializableListDecorator](http://docs.google.com/org/apache/commons/collections4/list/AbstractSerializableListDecorator.html)<[E](http://docs.google.com/org/apache/commons/collections4/list/AbstractSerializableListDecorator.html)> - Class in [org.apache.commons.collections4.list](http://docs.google.com/org/apache/commons/collections4/list/package-summary.html)

Serializable subclass of AbstractListDecorator.

[AbstractSerializableListDecorator(List<E>)](http://docs.google.com/org/apache/commons/collections4/list/AbstractSerializableListDecorator.html#AbstractSerializableListDecorator-java.util.List-) - Constructor for class org.apache.commons.collections4.list.[AbstractSerializableListDecorator](http://docs.google.com/org/apache/commons/collections4/list/AbstractSerializableListDecorator.html)

Constructor that wraps (not copies).

[AbstractSerializableSetDecorator](http://docs.google.com/org/apache/commons/collections4/set/AbstractSerializableSetDecorator.html)<[E](http://docs.google.com/org/apache/commons/collections4/set/AbstractSerializableSetDecorator.html)> - Class in [org.apache.commons.collections4.set](http://docs.google.com/org/apache/commons/collections4/set/package-summary.html)

Serializable subclass of AbstractSetDecorator.

[AbstractSerializableSetDecorator(Set<E>)](http://docs.google.com/org/apache/commons/collections4/set/AbstractSerializableSetDecorator.html#AbstractSerializableSetDecorator-java.util.Set-) - Constructor for class org.apache.commons.collections4.set.[AbstractSerializableSetDecorator](http://docs.google.com/org/apache/commons/collections4/set/AbstractSerializableSetDecorator.html)

Constructor.

[AbstractSetDecorator](http://docs.google.com/org/apache/commons/collections4/set/AbstractSetDecorator.html)<[E](http://docs.google.com/org/apache/commons/collections4/set/AbstractSetDecorator.html)> - Class in [org.apache.commons.collections4.set](http://docs.google.com/org/apache/commons/collections4/set/package-summary.html)

Decorates another Set to provide additional behaviour.

[AbstractSetDecorator()](http://docs.google.com/org/apache/commons/collections4/set/AbstractSetDecorator.html#AbstractSetDecorator--) - Constructor for class org.apache.commons.collections4.set.[AbstractSetDecorator](http://docs.google.com/org/apache/commons/collections4/set/AbstractSetDecorator.html)

Constructor only used in deserialization, do not use otherwise.

[AbstractSetDecorator(Set<E>)](http://docs.google.com/org/apache/commons/collections4/set/AbstractSetDecorator.html#AbstractSetDecorator-java.util.Set-) - Constructor for class org.apache.commons.collections4.set.[AbstractSetDecorator](http://docs.google.com/org/apache/commons/collections4/set/AbstractSetDecorator.html)

Constructor that wraps (not copies).

[AbstractSetValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractSetValuedMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractSetValuedMap.html),[V](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractSetValuedMap.html)> - Class in [org.apache.commons.collections4.multimap](http://docs.google.com/org/apache/commons/collections4/multimap/package-summary.html)

Abstract implementation of the [SetValuedMap](http://docs.google.com/org/apache/commons/collections4/SetValuedMap.html) interface to simplify the creation of subclass implementations.

[AbstractSetValuedMap()](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractSetValuedMap.html#AbstractSetValuedMap--) - Constructor for class org.apache.commons.collections4.multimap.[AbstractSetValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractSetValuedMap.html)

Constructor needed for subclass serialisation.

[AbstractSetValuedMap(Map<K, ? extends Set<V>>)](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractSetValuedMap.html#AbstractSetValuedMap-java.util.Map-) - Constructor for class org.apache.commons.collections4.multimap.[AbstractSetValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractSetValuedMap.html)

A constructor that wraps, not copies

[AbstractSortedBagDecorator](http://docs.google.com/org/apache/commons/collections4/bag/AbstractSortedBagDecorator.html)<[E](http://docs.google.com/org/apache/commons/collections4/bag/AbstractSortedBagDecorator.html)> - Class in [org.apache.commons.collections4.bag](http://docs.google.com/org/apache/commons/collections4/bag/package-summary.html)

Decorates another SortedBag to provide additional behaviour.

[AbstractSortedBagDecorator()](http://docs.google.com/org/apache/commons/collections4/bag/AbstractSortedBagDecorator.html#AbstractSortedBagDecorator--) - Constructor for class org.apache.commons.collections4.bag.[AbstractSortedBagDecorator](http://docs.google.com/org/apache/commons/collections4/bag/AbstractSortedBagDecorator.html)

Constructor only used in deserialization, do not use otherwise.

[AbstractSortedBagDecorator(SortedBag<E>)](http://docs.google.com/org/apache/commons/collections4/bag/AbstractSortedBagDecorator.html#AbstractSortedBagDecorator-org.apache.commons.collections4.SortedBag-) - Constructor for class org.apache.commons.collections4.bag.[AbstractSortedBagDecorator](http://docs.google.com/org/apache/commons/collections4/bag/AbstractSortedBagDecorator.html)

Constructor that wraps (not copies).

[AbstractSortedBidiMapDecorator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractSortedBidiMapDecorator.html)<[K](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractSortedBidiMapDecorator.html),[V](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractSortedBidiMapDecorator.html)> - Class in [org.apache.commons.collections4.bidimap](http://docs.google.com/org/apache/commons/collections4/bidimap/package-summary.html)

Provides a base decorator that enables additional functionality to be added to a SortedBidiMap via decoration.

[AbstractSortedBidiMapDecorator(SortedBidiMap<K, V>)](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractSortedBidiMapDecorator.html#AbstractSortedBidiMapDecorator-org.apache.commons.collections4.SortedBidiMap-) - Constructor for class org.apache.commons.collections4.bidimap.[AbstractSortedBidiMapDecorator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractSortedBidiMapDecorator.html)

Constructor that wraps (not copies).

[AbstractSortedMapDecorator](http://docs.google.com/org/apache/commons/collections4/map/AbstractSortedMapDecorator.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractSortedMapDecorator.html),[V](http://docs.google.com/org/apache/commons/collections4/map/AbstractSortedMapDecorator.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

Provides a base decorator that enables additional functionality to be added to a Map via decoration.

[AbstractSortedMapDecorator()](http://docs.google.com/org/apache/commons/collections4/map/AbstractSortedMapDecorator.html#AbstractSortedMapDecorator--) - Constructor for class org.apache.commons.collections4.map.[AbstractSortedMapDecorator](http://docs.google.com/org/apache/commons/collections4/map/AbstractSortedMapDecorator.html)

Constructor only used in deserialization, do not use otherwise.

[AbstractSortedMapDecorator(SortedMap<K, V>)](http://docs.google.com/org/apache/commons/collections4/map/AbstractSortedMapDecorator.html#AbstractSortedMapDecorator-java.util.SortedMap-) - Constructor for class org.apache.commons.collections4.map.[AbstractSortedMapDecorator](http://docs.google.com/org/apache/commons/collections4/map/AbstractSortedMapDecorator.html)

Constructor that wraps (not copies).

[AbstractSortedMapDecorator.SortedMapIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractSortedMapDecorator.SortedMapIterator.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/AbstractSortedMapDecorator.SortedMapIterator.html),[V](http://docs.google.com/org/apache/commons/collections4/map/AbstractSortedMapDecorator.SortedMapIterator.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

OrderedMapIterator implementation.

[AbstractSortedSetDecorator](http://docs.google.com/org/apache/commons/collections4/set/AbstractSortedSetDecorator.html)<[E](http://docs.google.com/org/apache/commons/collections4/set/AbstractSortedSetDecorator.html)> - Class in [org.apache.commons.collections4.set](http://docs.google.com/org/apache/commons/collections4/set/package-summary.html)

Decorates another SortedSet to provide additional behaviour.

[AbstractSortedSetDecorator()](http://docs.google.com/org/apache/commons/collections4/set/AbstractSortedSetDecorator.html#AbstractSortedSetDecorator--) - Constructor for class org.apache.commons.collections4.set.[AbstractSortedSetDecorator](http://docs.google.com/org/apache/commons/collections4/set/AbstractSortedSetDecorator.html)

Constructor only used in deserialization, do not use otherwise.

[AbstractSortedSetDecorator(Set<E>)](http://docs.google.com/org/apache/commons/collections4/set/AbstractSortedSetDecorator.html#AbstractSortedSetDecorator-java.util.Set-) - Constructor for class org.apache.commons.collections4.set.[AbstractSortedSetDecorator](http://docs.google.com/org/apache/commons/collections4/set/AbstractSortedSetDecorator.html)

Constructor that wraps (not copies).

[AbstractUntypedIteratorDecorator](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractUntypedIteratorDecorator.html)<[I](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractUntypedIteratorDecorator.html),[O](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractUntypedIteratorDecorator.html)> - Class in [org.apache.commons.collections4.iterators](http://docs.google.com/org/apache/commons/collections4/iterators/package-summary.html)

Provides basic behaviour for decorating an iterator with extra functionality without committing the generic type of the Iterator implementation.

[AbstractUntypedIteratorDecorator(Iterator<I>)](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractUntypedIteratorDecorator.html#AbstractUntypedIteratorDecorator-java.util.Iterator-) - Constructor for class org.apache.commons.collections4.iterators.[AbstractUntypedIteratorDecorator](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractUntypedIteratorDecorator.html)

Create a new AbstractUntypedIteratorDecorator.

[accept(CommandVisitor<T>)](http://docs.google.com/org/apache/commons/collections4/sequence/DeleteCommand.html#accept-org.apache.commons.collections4.sequence.CommandVisitor-) - Method in class org.apache.commons.collections4.sequence.[DeleteCommand](http://docs.google.com/org/apache/commons/collections4/sequence/DeleteCommand.html)

Accept a visitor.

[accept(CommandVisitor<T>)](http://docs.google.com/org/apache/commons/collections4/sequence/EditCommand.html#accept-org.apache.commons.collections4.sequence.CommandVisitor-) - Method in class org.apache.commons.collections4.sequence.[EditCommand](http://docs.google.com/org/apache/commons/collections4/sequence/EditCommand.html)

Accept a visitor.

[accept(CommandVisitor<T>)](http://docs.google.com/org/apache/commons/collections4/sequence/InsertCommand.html#accept-org.apache.commons.collections4.sequence.CommandVisitor-) - Method in class org.apache.commons.collections4.sequence.[InsertCommand](http://docs.google.com/org/apache/commons/collections4/sequence/InsertCommand.html)

Accept a visitor.

[accept(CommandVisitor<T>)](http://docs.google.com/org/apache/commons/collections4/sequence/KeepCommand.html#accept-org.apache.commons.collections4.sequence.CommandVisitor-) - Method in class org.apache.commons.collections4.sequence.[KeepCommand](http://docs.google.com/org/apache/commons/collections4/sequence/KeepCommand.html)

Accept a visitor.

[add(E, int)](http://docs.google.com/org/apache/commons/collections4/bag/AbstractBagDecorator.html#add-E-int-) - Method in class org.apache.commons.collections4.bag.[AbstractBagDecorator](http://docs.google.com/org/apache/commons/collections4/bag/AbstractBagDecorator.html)   [add(E)](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html#add-E-) - Method in class org.apache.commons.collections4.bag.[AbstractMapBag](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html)

Adds a new element to the bag, incrementing its count in the underlying map.

[add(E, int)](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html#add-E-int-) - Method in class org.apache.commons.collections4.bag.[AbstractMapBag](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html)

Adds a new element to the bag, incrementing its count in the map.

[add(E)](http://docs.google.com/org/apache/commons/collections4/Bag.html#add-E-) - Method in interface org.apache.commons.collections4.[Bag](http://docs.google.com/org/apache/commons/collections4/Bag.html)

*(Violation)* Adds one copy of the specified object to the Bag.

[add(E, int)](http://docs.google.com/org/apache/commons/collections4/Bag.html#add-E-int-) - Method in interface org.apache.commons.collections4.[Bag](http://docs.google.com/org/apache/commons/collections4/Bag.html)

Adds nCopies copies of the specified object to the Bag.

[add(E)](http://docs.google.com/org/apache/commons/collections4/bag/CollectionBag.html#add-E-) - Method in class org.apache.commons.collections4.bag.[CollectionBag](http://docs.google.com/org/apache/commons/collections4/bag/CollectionBag.html)

*(Change)* Adds one copy of the specified object to the Bag.

[add(E, int)](http://docs.google.com/org/apache/commons/collections4/bag/CollectionBag.html#add-E-int-) - Method in class org.apache.commons.collections4.bag.[CollectionBag](http://docs.google.com/org/apache/commons/collections4/bag/CollectionBag.html)

*(Change)* Adds count copies of the specified object to the Bag.

[add(E)](http://docs.google.com/org/apache/commons/collections4/bag/CollectionSortedBag.html#add-E-) - Method in class org.apache.commons.collections4.bag.[CollectionSortedBag](http://docs.google.com/org/apache/commons/collections4/bag/CollectionSortedBag.html)   [add(E, int)](http://docs.google.com/org/apache/commons/collections4/bag/CollectionSortedBag.html#add-E-int-) - Method in class org.apache.commons.collections4.bag.[CollectionSortedBag](http://docs.google.com/org/apache/commons/collections4/bag/CollectionSortedBag.html)   [add(E, int)](http://docs.google.com/org/apache/commons/collections4/bag/PredicatedBag.html#add-E-int-) - Method in class org.apache.commons.collections4.bag.[PredicatedBag](http://docs.google.com/org/apache/commons/collections4/bag/PredicatedBag.html)   [add(E, int)](http://docs.google.com/org/apache/commons/collections4/bag/SynchronizedBag.html#add-E-int-) - Method in class org.apache.commons.collections4.bag.[SynchronizedBag](http://docs.google.com/org/apache/commons/collections4/bag/SynchronizedBag.html)   [add(E, int)](http://docs.google.com/org/apache/commons/collections4/bag/TransformedBag.html#add-E-int-) - Method in class org.apache.commons.collections4.bag.[TransformedBag](http://docs.google.com/org/apache/commons/collections4/bag/TransformedBag.html)   [add(E)](http://docs.google.com/org/apache/commons/collections4/bag/TreeBag.html#add-E-) - Method in class org.apache.commons.collections4.bag.[TreeBag](http://docs.google.com/org/apache/commons/collections4/bag/TreeBag.html)

Adds a new element to the bag, incrementing its count in the underlying map.

[add(E)](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableBag.html#add-E-) - Method in class org.apache.commons.collections4.bag.[UnmodifiableBag](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableBag.html)   [add(E, int)](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableBag.html#add-E-int-) - Method in class org.apache.commons.collections4.bag.[UnmodifiableBag](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableBag.html)   [add(E)](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableSortedBag.html#add-E-) - Method in class org.apache.commons.collections4.bag.[UnmodifiableSortedBag](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableSortedBag.html)   [add(E, int)](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableSortedBag.html#add-E-int-) - Method in class org.apache.commons.collections4.bag.[UnmodifiableSortedBag](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableSortedBag.html)   [add(E)](http://docs.google.com/org/apache/commons/collections4/collection/AbstractCollectionDecorator.html#add-E-) - Method in class org.apache.commons.collections4.collection.[AbstractCollectionDecorator](http://docs.google.com/org/apache/commons/collections4/collection/AbstractCollectionDecorator.html)   [add(E)](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html#add-E-) - Method in class org.apache.commons.collections4.collection.[CompositeCollection](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html)

Adds an object to the collection, throwing UnsupportedOperationException unless a CollectionMutator strategy is specified.

[add(CompositeCollection<E>, List<Collection<E>>, E)](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.CollectionMutator.html#add-org.apache.commons.collections4.collection.CompositeCollection-java.util.List-E-) - Method in interface org.apache.commons.collections4.collection.[CompositeCollection.CollectionMutator](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.CollectionMutator.html)

Called when an object is to be added to the composite.

[add(C)](http://docs.google.com/org/apache/commons/collections4/collection/IndexedCollection.html#add-C-) - Method in class org.apache.commons.collections4.collection.[IndexedCollection](http://docs.google.com/org/apache/commons/collections4/collection/IndexedCollection.html) [add(E)](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.html#add-E-) - Method in class org.apache.commons.collections4.collection.[PredicatedCollection](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.html)

Override to validate the object being added to ensure it matches the predicate.

[add(E)](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.Builder.html#add-E-) - Method in class org.apache.commons.collections4.collection.[PredicatedCollection.Builder](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.Builder.html)

Adds the item to the builder.

[add(E)](http://docs.google.com/org/apache/commons/collections4/collection/SynchronizedCollection.html#add-E-) - Method in class org.apache.commons.collections4.collection.[SynchronizedCollection](http://docs.google.com/org/apache/commons/collections4/collection/SynchronizedCollection.html)   [add(E)](http://docs.google.com/org/apache/commons/collections4/collection/TransformedCollection.html#add-E-) - Method in class org.apache.commons.collections4.collection.[TransformedCollection](http://docs.google.com/org/apache/commons/collections4/collection/TransformedCollection.html)   [add(E)](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableBoundedCollection.html#add-E-) - Method in class org.apache.commons.collections4.collection.[UnmodifiableBoundedCollection](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableBoundedCollection.html)   [add(E)](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableCollection.html#add-E-) - Method in class org.apache.commons.collections4.collection.[UnmodifiableCollection](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableCollection.html)   [add(T)](http://docs.google.com/org/apache/commons/collections4/comparators/FixedOrderComparator.html#add-T-) - Method in class org.apache.commons.collections4.comparators.[FixedOrderComparator](http://docs.google.com/org/apache/commons/collections4/comparators/FixedOrderComparator.html)

Adds an item, which compares as after all items known to the Comparator.

[add(E)](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractListIteratorDecorator.html#add-E-) - Method in class org.apache.commons.collections4.iterators.[AbstractListIteratorDecorator](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractListIteratorDecorator.html) [add(Object)](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayListIterator.html#add-java.lang.Object-) - Method in class org.apache.commons.collections4.iterators.[ArrayListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayListIterator.html)

This iterator does not support modification of its backing collection, and so will always throw an [UnsupportedOperationException](https://docs.oracle.com/javase/7/docs/api/java/lang/UnsupportedOperationException.html?is-external=true) when this method is invoked.

[add(E)](http://docs.google.com/org/apache/commons/collections4/iterators/FilterListIterator.html#add-E-) - Method in class org.apache.commons.collections4.iterators.[FilterListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/FilterListIterator.html)

Not supported.

[add(E)](http://docs.google.com/org/apache/commons/collections4/iterators/ListIteratorWrapper.html#add-E-) - Method in class org.apache.commons.collections4.iterators.[ListIteratorWrapper](http://docs.google.com/org/apache/commons/collections4/iterators/ListIteratorWrapper.html)

Throws [UnsupportedOperationException](https://docs.oracle.com/javase/7/docs/api/java/lang/UnsupportedOperationException.html?is-external=true) unless the underlying Iterator is a ListIterator.

[add(E)](http://docs.google.com/org/apache/commons/collections4/iterators/LoopingListIterator.html#add-E-) - Method in class org.apache.commons.collections4.iterators.[LoopingListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/LoopingListIterator.html)

Inserts the specified element into the underlying list.

[add(E)](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayListIterator.html#add-E-) - Method in class org.apache.commons.collections4.iterators.[ObjectArrayListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayListIterator.html)

This iterator does not support modification of its backing array's size, and so will always throw an [UnsupportedOperationException](https://docs.oracle.com/javase/7/docs/api/java/lang/UnsupportedOperationException.html?is-external=true) when this method is invoked.

[add(E)](http://docs.google.com/org/apache/commons/collections4/iterators/ReverseListIterator.html#add-E-) - Method in class org.apache.commons.collections4.iterators.[ReverseListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ReverseListIterator.html)

Adds a new element to the list between the next and previous elements.

[add(E)](http://docs.google.com/org/apache/commons/collections4/iterators/SingletonListIterator.html#add-E-) - Method in class org.apache.commons.collections4.iterators.[SingletonListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/SingletonListIterator.html)

Add always throws [UnsupportedOperationException](https://docs.oracle.com/javase/7/docs/api/java/lang/UnsupportedOperationException.html?is-external=true).

[add(E)](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableListIterator.html#add-E-) - Method in class org.apache.commons.collections4.iterators.[UnmodifiableListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableListIterator.html)   [add(E)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#add-E-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)   [add(int, E)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#add-int-E-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)   [add(E)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedListIterator.html#add-E-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList.LinkedListIterator](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedListIterator.html)   [add(int, E)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedSubList.html#add-int-E-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList.LinkedSubList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedSubList.html)   [add(E)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedSubListIterator.html#add-E-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList.LinkedSubListIterator](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedSubListIterator.html)   [add(int, E)](http://docs.google.com/org/apache/commons/collections4/list/AbstractListDecorator.html#add-int-E-) - Method in class org.apache.commons.collections4.list.[AbstractListDecorator](http://docs.google.com/org/apache/commons/collections4/list/AbstractListDecorator.html)   [add(E)](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.Cursor.html#add-E-) - Method in class org.apache.commons.collections4.list.[CursorableLinkedList.Cursor](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.Cursor.html)

Adds an object to the list.

[add(E)](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.SubCursor.html#add-E-) - Method in class org.apache.commons.collections4.list.[CursorableLinkedList.SubCursor](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.SubCursor.html)   [add(E)](http://docs.google.com/org/apache/commons/collections4/list/FixedSizeList.html#add-E-) - Method in class org.apache.commons.collections4.list.[FixedSizeList](http://docs.google.com/org/apache/commons/collections4/list/FixedSizeList.html)   [add(int, E)](http://docs.google.com/org/apache/commons/collections4/list/FixedSizeList.html#add-int-E-) - Method in class org.apache.commons.collections4.list.[FixedSizeList](http://docs.google.com/org/apache/commons/collections4/list/FixedSizeList.html)   [add(int, E)](http://docs.google.com/org/apache/commons/collections4/list/GrowthList.html#add-int-E-) - Method in class org.apache.commons.collections4.list.[GrowthList](http://docs.google.com/org/apache/commons/collections4/list/GrowthList.html)

Decorate the add method to perform the growth behaviour.

[add(int, E)](http://docs.google.com/org/apache/commons/collections4/list/PredicatedList.html#add-int-E-) - Method in class org.apache.commons.collections4.list.[PredicatedList](http://docs.google.com/org/apache/commons/collections4/list/PredicatedList.html)   [add(E)](http://docs.google.com/org/apache/commons/collections4/list/PredicatedList.PredicatedListIterator.html#add-E-) - Method in class org.apache.commons.collections4.list.[PredicatedList.PredicatedListIterator](http://docs.google.com/org/apache/commons/collections4/list/PredicatedList.PredicatedListIterator.html)   [add(E)](http://docs.google.com/org/apache/commons/collections4/list/SetUniqueList.html#add-E-) - Method in class org.apache.commons.collections4.list.[SetUniqueList](http://docs.google.com/org/apache/commons/collections4/list/SetUniqueList.html)

Adds an element to the list if it is not already present.

[add(int, E)](http://docs.google.com/org/apache/commons/collections4/list/SetUniqueList.html#add-int-E-) - Method in class org.apache.commons.collections4.list.[SetUniqueList](http://docs.google.com/org/apache/commons/collections4/list/SetUniqueList.html)

Adds an element to a specific index in the list if it is not already present.

[add(int, E)](http://docs.google.com/org/apache/commons/collections4/list/TransformedList.html#add-int-E-) - Method in class org.apache.commons.collections4.list.[TransformedList](http://docs.google.com/org/apache/commons/collections4/list/TransformedList.html)   [add(E)](http://docs.google.com/org/apache/commons/collections4/list/TransformedList.TransformedListIterator.html#add-E-) - Method in class org.apache.commons.collections4.list.[TransformedList.TransformedListIterator](http://docs.google.com/org/apache/commons/collections4/list/TransformedList.TransformedListIterator.html)   [add(int, E)](http://docs.google.com/org/apache/commons/collections4/list/TreeList.html#add-int-E-) - Method in class org.apache.commons.collections4.list.[TreeList](http://docs.google.com/org/apache/commons/collections4/list/TreeList.html)

Adds a new element to the list.

[add(Object)](http://docs.google.com/org/apache/commons/collections4/list/UnmodifiableList.html#add-java.lang.Object-) - Method in class org.apache.commons.collections4.list.[UnmodifiableList](http://docs.google.com/org/apache/commons/collections4/list/UnmodifiableList.html)   [add(int, E)](http://docs.google.com/org/apache/commons/collections4/list/UnmodifiableList.html#add-int-E-) - Method in class org.apache.commons.collections4.list.[UnmodifiableList](http://docs.google.com/org/apache/commons/collections4/list/UnmodifiableList.html)   [add(Map.Entry<K, V>)](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableEntrySet.html#add-java.util.Map.Entry-) - Method in class org.apache.commons.collections4.map.[UnmodifiableEntrySet](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableEntrySet.html)   [add(E, int)](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.html#add-E-int-) - Method in class org.apache.commons.collections4.multiset.[AbstractMapMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.html)   [add(E)](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html#add-E-) - Method in class org.apache.commons.collections4.multiset.[AbstractMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html)   [add(E, int)](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html#add-E-int-) - Method in class org.apache.commons.collections4.multiset.[AbstractMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html)   [add(E, int)](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSetDecorator.html#add-E-int-) - Method in class org.apache.commons.collections4.multiset.[AbstractMultiSetDecorator](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSetDecorator.html)   [add(E)](http://docs.google.com/org/apache/commons/collections4/MultiSet.html#add-E-) - Method in interface org.apache.commons.collections4.[MultiSet](http://docs.google.com/org/apache/commons/collections4/MultiSet.html)

Adds one copy of the specified object to the MultiSet.

[add(E, int)](http://docs.google.com/org/apache/commons/collections4/MultiSet.html#add-E-int-) - Method in interface org.apache.commons.collections4.[MultiSet](http://docs.google.com/org/apache/commons/collections4/MultiSet.html)

Adds a number of occurrences of the specified object to the MultiSet.

[add(E, int)](http://docs.google.com/org/apache/commons/collections4/multiset/PredicatedMultiSet.html#add-E-int-) - Method in class org.apache.commons.collections4.multiset.[PredicatedMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/PredicatedMultiSet.html)   [add(E, int)](http://docs.google.com/org/apache/commons/collections4/multiset/SynchronizedMultiSet.html#add-E-int-) - Method in class org.apache.commons.collections4.multiset.[SynchronizedMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/SynchronizedMultiSet.html)   [add(E)](http://docs.google.com/org/apache/commons/collections4/multiset/UnmodifiableMultiSet.html#add-E-) - Method in class org.apache.commons.collections4.multiset.[UnmodifiableMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/UnmodifiableMultiSet.html)   [add(E, int)](http://docs.google.com/org/apache/commons/collections4/multiset/UnmodifiableMultiSet.html#add-E-int-) - Method in class org.apache.commons.collections4.multiset.[UnmodifiableMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/UnmodifiableMultiSet.html)   [add(E)](http://docs.google.com/org/apache/commons/collections4/queue/CircularFifoQueue.html#add-E-) - Method in class org.apache.commons.collections4.queue.[CircularFifoQueue](http://docs.google.com/org/apache/commons/collections4/queue/CircularFifoQueue.html)

Adds the given element to this queue.

[add(Object)](http://docs.google.com/org/apache/commons/collections4/queue/UnmodifiableQueue.html#add-java.lang.Object-) - Method in class org.apache.commons.collections4.queue.[UnmodifiableQueue](http://docs.google.com/org/apache/commons/collections4/queue/UnmodifiableQueue.html)   [add(E)](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html#add-E-) - Method in class org.apache.commons.collections4.set.[CompositeSet](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html)

Adds an object to the collection, throwing UnsupportedOperationException unless a SetMutator strategy is specified.

[add(CompositeSet<E>, List<Set<E>>, E)](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.SetMutator.html#add-org.apache.commons.collections4.set.CompositeSet-java.util.List-E-) - Method in interface org.apache.commons.collections4.set.[CompositeSet.SetMutator](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.SetMutator.html)

Called when an object is to be added to the composite.

[add(E)](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html#add-E-) - Method in class org.apache.commons.collections4.set.[ListOrderedSet](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html)   [add(int, E)](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html#add-int-E-) - Method in class org.apache.commons.collections4.set.[ListOrderedSet](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html)

Inserts the specified element at the specified position if it is not yet contained in this ordered set (optional operation).

[add(E)](http://docs.google.com/org/apache/commons/collections4/set/MapBackedSet.html#add-E-) - Method in class org.apache.commons.collections4.set.[MapBackedSet](http://docs.google.com/org/apache/commons/collections4/set/MapBackedSet.html)   [add(E)](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableNavigableSet.html#add-E-) - Method in class org.apache.commons.collections4.set.[UnmodifiableNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableNavigableSet.html)   [add(E)](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableSet.html#add-E-) - Method in class org.apache.commons.collections4.set.[UnmodifiableSet](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableSet.html)   [add(E)](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableSortedSet.html#add-E-) - Method in class org.apache.commons.collections4.set.[UnmodifiableSortedSet](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableSortedSet.html)   [addAll(Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html#addAll-java.util.Collection-) - Method in class org.apache.commons.collections4.bag.[AbstractMapBag](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html)

Invokes [AbstractMapBag.add(Object)](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html#add-E-) for each element in the given collection.

[addAll(Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/bag/CollectionBag.html#addAll-java.util.Collection-) - Method in class org.apache.commons.collections4.bag.[CollectionBag](http://docs.google.com/org/apache/commons/collections4/bag/CollectionBag.html)   [addAll(Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/bag/CollectionSortedBag.html#addAll-java.util.Collection-) - Method in class org.apache.commons.collections4.bag.[CollectionSortedBag](http://docs.google.com/org/apache/commons/collections4/bag/CollectionSortedBag.html)   [addAll(Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableBag.html#addAll-java.util.Collection-) - Method in class org.apache.commons.collections4.bag.[UnmodifiableBag](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableBag.html)   [addAll(Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableSortedBag.html#addAll-java.util.Collection-) - Method in class org.apache.commons.collections4.bag.[UnmodifiableSortedBag](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableSortedBag.html)   [addAll(Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/collection/AbstractCollectionDecorator.html#addAll-java.util.Collection-) - Method in class org.apache.commons.collections4.collection.[AbstractCollectionDecorator](http://docs.google.com/org/apache/commons/collections4/collection/AbstractCollectionDecorator.html)   [addAll(Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html#addAll-java.util.Collection-) - Method in class org.apache.commons.collections4.collection.[CompositeCollection](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html)

Adds a collection of elements to this collection, throwing UnsupportedOperationException unless a CollectionMutator strategy is specified.

[addAll(CompositeCollection<E>, List<Collection<E>>, Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.CollectionMutator.html#addAll-org.apache.commons.collections4.collection.CompositeCollection-java.util.List-java.util.Collection-) - Method in interface org.apache.commons.collections4.collection.[CompositeCollection.CollectionMutator](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.CollectionMutator.html)

Called when a collection is to be added to the composite.

[addAll(Collection<? extends C>)](http://docs.google.com/org/apache/commons/collections4/collection/IndexedCollection.html#addAll-java.util.Collection-) - Method in class org.apache.commons.collections4.collection.[IndexedCollection](http://docs.google.com/org/apache/commons/collections4/collection/IndexedCollection.html)   [addAll(Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.html#addAll-java.util.Collection-) - Method in class org.apache.commons.collections4.collection.[PredicatedCollection](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.html)

Override to validate the objects being added to ensure they match the predicate.

[addAll(Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.Builder.html#addAll-java.util.Collection-) - Method in class org.apache.commons.collections4.collection.[PredicatedCollection.Builder](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.Builder.html)

Adds all elements from the given collection to the builder.

[addAll(Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/collection/SynchronizedCollection.html#addAll-java.util.Collection-) - Method in class org.apache.commons.collections4.collection.[SynchronizedCollection](http://docs.google.com/org/apache/commons/collections4/collection/SynchronizedCollection.html)   [addAll(Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/collection/TransformedCollection.html#addAll-java.util.Collection-) - Method in class org.apache.commons.collections4.collection.[TransformedCollection](http://docs.google.com/org/apache/commons/collections4/collection/TransformedCollection.html)   [addAll(Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableBoundedCollection.html#addAll-java.util.Collection-) - Method in class org.apache.commons.collections4.collection.[UnmodifiableBoundedCollection](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableBoundedCollection.html)   [addAll(Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableCollection.html#addAll-java.util.Collection-) - Method in class org.apache.commons.collections4.collection.[UnmodifiableCollection](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableCollection.html)   [addAll(Collection<C>, Iterable<? extends C>)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#addAll-java.util.Collection-java.lang.Iterable-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Adds all elements in the [Iterable](https://docs.oracle.com/javase/7/docs/api/java/lang/Iterable.html?is-external=true) to the given collection.

[addAll(Collection<C>, Iterator<? extends C>)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#addAll-java.util.Collection-java.util.Iterator-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Adds all elements in the iteration to the given collection.

[addAll(Collection<C>, Enumeration<? extends C>)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#addAll-java.util.Collection-java.util.Enumeration-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Adds all elements in the enumeration to the given collection.

[addAll(Collection<C>, C...)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#addAll-java.util.Collection-C...-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Adds all elements in the array to the given collection.

[addAll(Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#addAll-java.util.Collection-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)   [addAll(int, Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#addAll-int-java.util.Collection-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)   [addAll(Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedSubList.html#addAll-java.util.Collection-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList.LinkedSubList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedSubList.html)   [addAll(int, Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedSubList.html#addAll-int-java.util.Collection-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList.LinkedSubList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedSubList.html)   [addAll(int, Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/list/AbstractListDecorator.html#addAll-int-java.util.Collection-) - Method in class org.apache.commons.collections4.list.[AbstractListDecorator](http://docs.google.com/org/apache/commons/collections4/list/AbstractListDecorator.html)   [addAll(Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/list/FixedSizeList.html#addAll-java.util.Collection-) - Method in class org.apache.commons.collections4.list.[FixedSizeList](http://docs.google.com/org/apache/commons/collections4/list/FixedSizeList.html)   [addAll(int, Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/list/FixedSizeList.html#addAll-int-java.util.Collection-) - Method in class org.apache.commons.collections4.list.[FixedSizeList](http://docs.google.com/org/apache/commons/collections4/list/FixedSizeList.html)   [addAll(int, Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/list/GrowthList.html#addAll-int-java.util.Collection-) - Method in class org.apache.commons.collections4.list.[GrowthList](http://docs.google.com/org/apache/commons/collections4/list/GrowthList.html)

Decorate the addAll method to perform the growth behaviour.

[addAll(int, Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/list/PredicatedList.html#addAll-int-java.util.Collection-) - Method in class org.apache.commons.collections4.list.[PredicatedList](http://docs.google.com/org/apache/commons/collections4/list/PredicatedList.html)   [addAll(Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/list/SetUniqueList.html#addAll-java.util.Collection-) - Method in class org.apache.commons.collections4.list.[SetUniqueList](http://docs.google.com/org/apache/commons/collections4/list/SetUniqueList.html)

Adds a collection of objects to the end of the list avoiding duplicates.

[addAll(int, Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/list/SetUniqueList.html#addAll-int-java.util.Collection-) - Method in class org.apache.commons.collections4.list.[SetUniqueList](http://docs.google.com/org/apache/commons/collections4/list/SetUniqueList.html)

Adds a collection of objects a specific index in the list avoiding duplicates.

[addAll(int, Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/list/TransformedList.html#addAll-int-java.util.Collection-) - Method in class org.apache.commons.collections4.list.[TransformedList](http://docs.google.com/org/apache/commons/collections4/list/TransformedList.html)   [addAll(Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/list/TreeList.html#addAll-java.util.Collection-) - Method in class org.apache.commons.collections4.list.[TreeList](http://docs.google.com/org/apache/commons/collections4/list/TreeList.html)

Appends all of the elements in the specified collection to the end of this list, in the order that they are returned by the specified collection's Iterator.

[addAll(Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/list/UnmodifiableList.html#addAll-java.util.Collection-) - Method in class org.apache.commons.collections4.list.[UnmodifiableList](http://docs.google.com/org/apache/commons/collections4/list/UnmodifiableList.html)   [addAll(int, Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/list/UnmodifiableList.html#addAll-int-java.util.Collection-) - Method in class org.apache.commons.collections4.list.[UnmodifiableList](http://docs.google.com/org/apache/commons/collections4/list/UnmodifiableList.html)   [addAll(Collection<? extends Map.Entry<K, V>>)](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableEntrySet.html#addAll-java.util.Collection-) - Method in class org.apache.commons.collections4.map.[UnmodifiableEntrySet](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableEntrySet.html)   [addAll(Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/multiset/UnmodifiableMultiSet.html#addAll-java.util.Collection-) - Method in class org.apache.commons.collections4.multiset.[UnmodifiableMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/UnmodifiableMultiSet.html)   [addAll(Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/queue/UnmodifiableQueue.html#addAll-java.util.Collection-) - Method in class org.apache.commons.collections4.queue.[UnmodifiableQueue](http://docs.google.com/org/apache/commons/collections4/queue/UnmodifiableQueue.html)   [addAll(Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html#addAll-java.util.Collection-) - Method in class org.apache.commons.collections4.set.[CompositeSet](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html)

Adds a collection of elements to this composite, throwing UnsupportedOperationException unless a SetMutator strategy is specified.

[addAll(CompositeSet<E>, List<Set<E>>, Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.SetMutator.html#addAll-org.apache.commons.collections4.set.CompositeSet-java.util.List-java.util.Collection-) - Method in interface org.apache.commons.collections4.set.[CompositeSet.SetMutator](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.SetMutator.html)

Called when a collection is to be added to the composite.

[addAll(Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html#addAll-java.util.Collection-) - Method in class org.apache.commons.collections4.set.[ListOrderedSet](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html)   [addAll(int, Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html#addAll-int-java.util.Collection-) - Method in class org.apache.commons.collections4.set.[ListOrderedSet](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html)

Inserts all elements in the specified collection not yet contained in the ordered set at the specified position (optional operation).

[addAll(Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/set/MapBackedSet.html#addAll-java.util.Collection-) - Method in class org.apache.commons.collections4.set.[MapBackedSet](http://docs.google.com/org/apache/commons/collections4/set/MapBackedSet.html)   [addAll(Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableNavigableSet.html#addAll-java.util.Collection-) - Method in class org.apache.commons.collections4.set.[UnmodifiableNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableNavigableSet.html)   [addAll(Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableSet.html#addAll-java.util.Collection-) - Method in class org.apache.commons.collections4.set.[UnmodifiableSet](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableSet.html)   [addAll(Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableSortedSet.html#addAll-java.util.Collection-) - Method in class org.apache.commons.collections4.set.[UnmodifiableSortedSet](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableSortedSet.html)   [addAsEqual(T, T)](http://docs.google.com/org/apache/commons/collections4/comparators/FixedOrderComparator.html#addAsEqual-T-T-) - Method in class org.apache.commons.collections4.comparators.[FixedOrderComparator](http://docs.google.com/org/apache/commons/collections4/comparators/FixedOrderComparator.html)

Adds a new item, which compares as equal to the given existing item.

[addComparator(Comparator<E>)](http://docs.google.com/org/apache/commons/collections4/comparators/ComparatorChain.html#addComparator-java.util.Comparator-) - Method in class org.apache.commons.collections4.comparators.[ComparatorChain](http://docs.google.com/org/apache/commons/collections4/comparators/ComparatorChain.html)

Add a Comparator to the end of the chain using the forward sort order

[addComparator(Comparator<E>, boolean)](http://docs.google.com/org/apache/commons/collections4/comparators/ComparatorChain.html#addComparator-java.util.Comparator-boolean-) - Method in class org.apache.commons.collections4.comparators.[ComparatorChain](http://docs.google.com/org/apache/commons/collections4/comparators/ComparatorChain.html)

Add a Comparator to the end of the chain using the given sort order

[addComposited(Collection<E>)](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html#addComposited-java.util.Collection-) - Method in class org.apache.commons.collections4.collection.[CompositeCollection](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html)

Add these Collections to the list of collections in this composite

[addComposited(Collection<E>, Collection<E>)](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html#addComposited-java.util.Collection-java.util.Collection-) - Method in class org.apache.commons.collections4.collection.[CompositeCollection](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html)

Add these Collections to the list of collections in this composite

[addComposited(Collection<E>...)](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html#addComposited-java.util.Collection...-) - Method in class org.apache.commons.collections4.collection.[CompositeCollection](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html)

Add these Collections to the list of collections in this composite

[addComposited(Map<K, V>)](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html#addComposited-java.util.Map-) - Method in class org.apache.commons.collections4.map.[CompositeMap](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html)

Add an additional Map to the composite.

[addComposited(Set<E>)](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html#addComposited-java.util.Set-) - Method in class org.apache.commons.collections4.set.[CompositeSet](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html)

Add a Set to this composite.

[addComposited(Set<E>, Set<E>)](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html#addComposited-java.util.Set-java.util.Set-) - Method in class org.apache.commons.collections4.set.[CompositeSet](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html)

Add these Sets to the list of sets in this composite.

[addComposited(Set<E>...)](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html#addComposited-java.util.Set...-) - Method in class org.apache.commons.collections4.set.[CompositeSet](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html)

Add these Sets to the list of sets in this composite

[addEntry(AbstractHashedMap.HashEntry<K, V>, int)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#addEntry-org.apache.commons.collections4.map.AbstractHashedMap.HashEntry-int-) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Adds an entry into this map.

[addEntry(AbstractHashedMap.HashEntry<K, V>, int)](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html#addEntry-org.apache.commons.collections4.map.AbstractHashedMap.HashEntry-int-) - Method in class org.apache.commons.collections4.map.[AbstractLinkedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html)

Adds an entry into this map, maintaining insertion order.

[addFirst(E)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#addFirst-E-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)   [addIgnoreNull(Collection<T>, T)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#addIgnoreNull-java.util.Collection-T-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Adds an element to the collection unless the element is null.

[addIterator(Iterator<? extends E>)](http://docs.google.com/org/apache/commons/collections4/iterators/CollatingIterator.html#addIterator-java.util.Iterator-) - Method in class org.apache.commons.collections4.iterators.[CollatingIterator](http://docs.google.com/org/apache/commons/collections4/iterators/CollatingIterator.html)

Adds the given [Iterator](https://docs.oracle.com/javase/7/docs/api/java/util/Iterator.html?is-external=true) to the iterators being collated.

[addIterator(Iterator<? extends E>)](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorChain.html#addIterator-java.util.Iterator-) - Method in class org.apache.commons.collections4.iterators.[IteratorChain](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorChain.html)

Add an Iterator to the end of the chain

[addLast(E)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#addLast-E-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)   [addMapping(int, int, K, V)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#addMapping-int-int-K-V-) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Adds a new key-value mapping into this map.

[addMapping(int, int, K, V)](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html#addMapping-int-int-K-V-) - Method in class org.apache.commons.collections4.map.[LRUMap](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html)

Adds a new key-value mapping into this map.

[addNode(AbstractLinkedList.Node<E>, AbstractLinkedList.Node<E>)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#addNode-org.apache.commons.collections4.list.AbstractLinkedList.Node-org.apache.commons.collections4.list.AbstractLinkedList.Node-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)

Inserts a new node into the list.

[addNode(AbstractLinkedList.Node<E>, AbstractLinkedList.Node<E>)](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.html#addNode-org.apache.commons.collections4.list.AbstractLinkedList.Node-org.apache.commons.collections4.list.AbstractLinkedList.Node-) - Method in class org.apache.commons.collections4.list.[CursorableLinkedList](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.html)

Inserts a new node into the list.

[addNodeAfter(AbstractLinkedList.Node<E>, E)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#addNodeAfter-org.apache.commons.collections4.list.AbstractLinkedList.Node-E-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)

Creates a new node with the specified object as its value and inserts it after node.

[addNodeBefore(AbstractLinkedList.Node<E>, E)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#addNodeBefore-org.apache.commons.collections4.list.AbstractLinkedList.Node-E-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)

Creates a new node with the specified object as its value and inserts it before node.

[addNodeToCache(AbstractLinkedList.Node<E>)](http://docs.google.com/org/apache/commons/collections4/list/NodeCachingLinkedList.html#addNodeToCache-org.apache.commons.collections4.list.AbstractLinkedList.Node-) - Method in class org.apache.commons.collections4.list.[NodeCachingLinkedList](http://docs.google.com/org/apache/commons/collections4/list/NodeCachingLinkedList.html)

Adds a node to the cache, if the cache isn't full.

[after](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkEntry.html#after) - Variable in class org.apache.commons.collections4.map.[AbstractLinkedMap.LinkEntry](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkEntry.html)

The entry after this one in the order

[allMatch(Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html#allMatch-org.apache.commons.collections4.Predicate-) - Method in class org.apache.commons.collections4.[FluentIterable](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html)

Checks if all elements contained in this iterable are matching the provided predicate.

[AllPredicate](http://docs.google.com/org/apache/commons/collections4/functors/AllPredicate.html)<[T](http://docs.google.com/org/apache/commons/collections4/functors/AllPredicate.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Predicate implementation that returns true if all the predicates return true.

[AllPredicate(Predicate<? super T>...)](http://docs.google.com/org/apache/commons/collections4/functors/AllPredicate.html#AllPredicate-org.apache.commons.collections4.Predicate...-) - Constructor for class org.apache.commons.collections4.functors.[AllPredicate](http://docs.google.com/org/apache/commons/collections4/functors/AllPredicate.html)

Constructor that performs no validation.

[allPredicate(Predicate<? super T>...)](http://docs.google.com/org/apache/commons/collections4/functors/AllPredicate.html#allPredicate-org.apache.commons.collections4.Predicate...-) - Static method in class org.apache.commons.collections4.functors.[AllPredicate](http://docs.google.com/org/apache/commons/collections4/functors/AllPredicate.html)

Factory to create the predicate.

[allPredicate(Collection<? extends Predicate<? super T>>)](http://docs.google.com/org/apache/commons/collections4/functors/AllPredicate.html#allPredicate-java.util.Collection-) - Static method in class org.apache.commons.collections4.functors.[AllPredicate](http://docs.google.com/org/apache/commons/collections4/functors/AllPredicate.html)

Factory to create the predicate.

[allPredicate(Predicate<? super T>...)](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html#allPredicate-org.apache.commons.collections4.Predicate...-) - Static method in class org.apache.commons.collections4.[PredicateUtils](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html)

Create a new Predicate that returns true only if all of the specified predicates are true.

[allPredicate(Collection<? extends Predicate<? super T>>)](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html#allPredicate-java.util.Collection-) - Static method in class org.apache.commons.collections4.[PredicateUtils](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html)

Create a new Predicate that returns true only if all of the specified predicates are true.

[AndPredicate](http://docs.google.com/org/apache/commons/collections4/functors/AndPredicate.html)<[T](http://docs.google.com/org/apache/commons/collections4/functors/AndPredicate.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Predicate implementation that returns true if both the predicates return true.

[AndPredicate(Predicate<? super T>, Predicate<? super T>)](http://docs.google.com/org/apache/commons/collections4/functors/AndPredicate.html#AndPredicate-org.apache.commons.collections4.Predicate-org.apache.commons.collections4.Predicate-) - Constructor for class org.apache.commons.collections4.functors.[AndPredicate](http://docs.google.com/org/apache/commons/collections4/functors/AndPredicate.html)

Constructor that performs no validation.

[andPredicate(Predicate<? super T>, Predicate<? super T>)](http://docs.google.com/org/apache/commons/collections4/functors/AndPredicate.html#andPredicate-org.apache.commons.collections4.Predicate-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.functors.[AndPredicate](http://docs.google.com/org/apache/commons/collections4/functors/AndPredicate.html)

Factory to create the predicate.

[andPredicate(Predicate<? super T>, Predicate<? super T>)](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html#andPredicate-org.apache.commons.collections4.Predicate-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[PredicateUtils](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html)

Create a new Predicate that returns true only if both of the specified predicates are true.

[anyMatch(Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html#anyMatch-org.apache.commons.collections4.Predicate-) - Method in class org.apache.commons.collections4.[FluentIterable](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html)

Checks if this iterable contains any element matching the provided predicate.

[AnyPredicate](http://docs.google.com/org/apache/commons/collections4/functors/AnyPredicate.html)<[T](http://docs.google.com/org/apache/commons/collections4/functors/AnyPredicate.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Predicate implementation that returns true if any of the predicates return true.

[AnyPredicate(Predicate<? super T>...)](http://docs.google.com/org/apache/commons/collections4/functors/AnyPredicate.html#AnyPredicate-org.apache.commons.collections4.Predicate...-) - Constructor for class org.apache.commons.collections4.functors.[AnyPredicate](http://docs.google.com/org/apache/commons/collections4/functors/AnyPredicate.html)

Constructor that performs no validation.

[anyPredicate(Predicate<? super T>...)](http://docs.google.com/org/apache/commons/collections4/functors/AnyPredicate.html#anyPredicate-org.apache.commons.collections4.Predicate...-) - Static method in class org.apache.commons.collections4.functors.[AnyPredicate](http://docs.google.com/org/apache/commons/collections4/functors/AnyPredicate.html)

Factory to create the predicate.

[anyPredicate(Collection<? extends Predicate<? super T>>)](http://docs.google.com/org/apache/commons/collections4/functors/AnyPredicate.html#anyPredicate-java.util.Collection-) - Static method in class org.apache.commons.collections4.functors.[AnyPredicate](http://docs.google.com/org/apache/commons/collections4/functors/AnyPredicate.html)

Factory to create the predicate.

[anyPredicate(Predicate<? super T>...)](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html#anyPredicate-org.apache.commons.collections4.Predicate...-) - Static method in class org.apache.commons.collections4.[PredicateUtils](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html)

Create a new Predicate that returns true if any of the specified predicates are true.

[anyPredicate(Collection<? extends Predicate<? super T>>)](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html#anyPredicate-java.util.Collection-) - Static method in class org.apache.commons.collections4.[PredicateUtils](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html)

Create a new Predicate that returns true if any of the specified predicates are true.

[append(E...)](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html#append-E...-) - Method in class org.apache.commons.collections4.[FluentIterable](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html)

Returns a new FluentIterable whose iterator will first traverse the elements of the current iterable, followed by the provided elements.

[append(Iterable<? extends E>)](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html#append-java.lang.Iterable-) - Method in class org.apache.commons.collections4.[FluentIterable](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html)

Returns a new FluentIterable whose iterator will first traverse the elements of the current iterable, followed by the elements of the provided iterable.

[append(KeepCommand<T>)](http://docs.google.com/org/apache/commons/collections4/sequence/EditScript.html#append-org.apache.commons.collections4.sequence.KeepCommand-) - Method in class org.apache.commons.collections4.sequence.[EditScript](http://docs.google.com/org/apache/commons/collections4/sequence/EditScript.html)

Add a keep command to the script.

[append(InsertCommand<T>)](http://docs.google.com/org/apache/commons/collections4/sequence/EditScript.html#append-org.apache.commons.collections4.sequence.InsertCommand-) - Method in class org.apache.commons.collections4.sequence.[EditScript](http://docs.google.com/org/apache/commons/collections4/sequence/EditScript.html)

Add an insert command to the script.

[append(DeleteCommand<T>)](http://docs.google.com/org/apache/commons/collections4/sequence/EditScript.html#append-org.apache.commons.collections4.sequence.DeleteCommand-) - Method in class org.apache.commons.collections4.sequence.[EditScript](http://docs.google.com/org/apache/commons/collections4/sequence/EditScript.html)

Add a delete command to the script.

[ArrayIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayIterator.html)<[E](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayIterator.html)> - Class in [org.apache.commons.collections4.iterators](http://docs.google.com/org/apache/commons/collections4/iterators/package-summary.html)

Implements an [Iterator](https://docs.oracle.com/javase/7/docs/api/java/util/Iterator.html?is-external=true) over any array.

[ArrayIterator(Object)](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayIterator.html#ArrayIterator-java.lang.Object-) - Constructor for class org.apache.commons.collections4.iterators.[ArrayIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayIterator.html)

Constructs an ArrayIterator that will iterate over the values in the specified array.

[ArrayIterator(Object, int)](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayIterator.html#ArrayIterator-java.lang.Object-int-) - Constructor for class org.apache.commons.collections4.iterators.[ArrayIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayIterator.html)

Constructs an ArrayIterator that will iterate over the values in the specified array from a specific start index.

[ArrayIterator(Object, int, int)](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayIterator.html#ArrayIterator-java.lang.Object-int-int-) - Constructor for class org.apache.commons.collections4.iterators.[ArrayIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayIterator.html)

Construct an ArrayIterator that will iterate over a range of values in the specified array.

[arrayIterator(E...)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#arrayIterator-E...-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets an iterator over an object array.

[arrayIterator(Object)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#arrayIterator-java.lang.Object-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets an iterator over an object or primitive array.

[arrayIterator(E[], int)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#arrayIterator-E:A-int-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets an iterator over the end part of an object array.

[arrayIterator(Object, int)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#arrayIterator-java.lang.Object-int-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets an iterator over the end part of an object or primitive array.

[arrayIterator(E[], int, int)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#arrayIterator-E:A-int-int-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets an iterator over part of an object array.

[arrayIterator(Object, int, int)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#arrayIterator-java.lang.Object-int-int-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets an iterator over part of an object or primitive array.

[ArrayListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayListIterator.html)<[E](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayListIterator.html)> - Class in [org.apache.commons.collections4.iterators](http://docs.google.com/org/apache/commons/collections4/iterators/package-summary.html)

Implements a [ListIterator](https://docs.oracle.com/javase/7/docs/api/java/util/ListIterator.html?is-external=true) over an array.

[ArrayListIterator(Object)](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayListIterator.html#ArrayListIterator-java.lang.Object-) - Constructor for class org.apache.commons.collections4.iterators.[ArrayListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayListIterator.html)

Constructs an ArrayListIterator that will iterate over the values in the specified array.

[ArrayListIterator(Object, int)](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayListIterator.html#ArrayListIterator-java.lang.Object-int-) - Constructor for class org.apache.commons.collections4.iterators.[ArrayListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayListIterator.html)

Constructs an ArrayListIterator that will iterate over the values in the specified array from a specific start index.

[ArrayListIterator(Object, int, int)](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayListIterator.html#ArrayListIterator-java.lang.Object-int-int-) - Constructor for class org.apache.commons.collections4.iterators.[ArrayListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayListIterator.html)

Construct an ArrayListIterator that will iterate over a range of values in the specified array.

[arrayListIterator(E...)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#arrayListIterator-E...-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets a list iterator over an object array.

[arrayListIterator(Object)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#arrayListIterator-java.lang.Object-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets a list iterator over an object or primitive array.

[arrayListIterator(E[], int)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#arrayListIterator-E:A-int-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets a list iterator over the end part of an object array.

[arrayListIterator(Object, int)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#arrayListIterator-java.lang.Object-int-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets a list iterator over the end part of an object or primitive array.

[arrayListIterator(E[], int, int)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#arrayListIterator-E:A-int-int-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets a list iterator over part of an object array.

[arrayListIterator(Object, int, int)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#arrayListIterator-java.lang.Object-int-int-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets a list iterator over part of an object or primitive array.

[ArrayListValuedHashMap](http://docs.google.com/org/apache/commons/collections4/multimap/ArrayListValuedHashMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/multimap/ArrayListValuedHashMap.html),[V](http://docs.google.com/org/apache/commons/collections4/multimap/ArrayListValuedHashMap.html)> - Class in [org.apache.commons.collections4.multimap](http://docs.google.com/org/apache/commons/collections4/multimap/package-summary.html)

Implements a ListValuedMap, using a [HashMap](https://docs.oracle.com/javase/7/docs/api/java/util/HashMap.html?is-external=true) to provide data storage and [ArrayList](https://docs.oracle.com/javase/7/docs/api/java/util/ArrayList.html?is-external=true)s as value collections.

[ArrayListValuedHashMap()](http://docs.google.com/org/apache/commons/collections4/multimap/ArrayListValuedHashMap.html#ArrayListValuedHashMap--) - Constructor for class org.apache.commons.collections4.multimap.[ArrayListValuedHashMap](http://docs.google.com/org/apache/commons/collections4/multimap/ArrayListValuedHashMap.html)

Creates an empty ArrayListValuedHashMap with the default initial map capacity (16) and the default initial list capacity (3).

[ArrayListValuedHashMap(int)](http://docs.google.com/org/apache/commons/collections4/multimap/ArrayListValuedHashMap.html#ArrayListValuedHashMap-int-) - Constructor for class org.apache.commons.collections4.multimap.[ArrayListValuedHashMap](http://docs.google.com/org/apache/commons/collections4/multimap/ArrayListValuedHashMap.html)

Creates an empty ArrayListValuedHashMap with the default initial map capacity (16) and the specified initial list capacity.

[ArrayListValuedHashMap(int, int)](http://docs.google.com/org/apache/commons/collections4/multimap/ArrayListValuedHashMap.html#ArrayListValuedHashMap-int-int-) - Constructor for class org.apache.commons.collections4.multimap.[ArrayListValuedHashMap](http://docs.google.com/org/apache/commons/collections4/multimap/ArrayListValuedHashMap.html)

Creates an empty ArrayListValuedHashMap with the specified initial map and list capacities.

[ArrayListValuedHashMap(MultiValuedMap<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/multimap/ArrayListValuedHashMap.html#ArrayListValuedHashMap-org.apache.commons.collections4.MultiValuedMap-) - Constructor for class org.apache.commons.collections4.multimap.[ArrayListValuedHashMap](http://docs.google.com/org/apache/commons/collections4/multimap/ArrayListValuedHashMap.html)

Creates an ArrayListValuedHashMap copying all the mappings of the given map.

[ArrayListValuedHashMap(Map<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/multimap/ArrayListValuedHashMap.html#ArrayListValuedHashMap-java.util.Map-) - Constructor for class org.apache.commons.collections4.multimap.[ArrayListValuedHashMap](http://docs.google.com/org/apache/commons/collections4/multimap/ArrayListValuedHashMap.html)

Creates an ArrayListValuedHashMap copying all the mappings of the given map.

[ArrayStack](http://docs.google.com/org/apache/commons/collections4/ArrayStack.html)<[E](http://docs.google.com/org/apache/commons/collections4/ArrayStack.html)> - Class in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

Deprecated.

use [ArrayDeque](https://docs.oracle.com/javase/7/docs/api/java/util/ArrayDeque.html?is-external=true) instead (available from Java 1.6)

[ArrayStack()](http://docs.google.com/org/apache/commons/collections4/ArrayStack.html#ArrayStack--) - Constructor for class org.apache.commons.collections4.[ArrayStack](http://docs.google.com/org/apache/commons/collections4/ArrayStack.html)

Deprecated.

Constructs a new empty ArrayStack.

[ArrayStack(int)](http://docs.google.com/org/apache/commons/collections4/ArrayStack.html#ArrayStack-int-) - Constructor for class org.apache.commons.collections4.[ArrayStack](http://docs.google.com/org/apache/commons/collections4/ArrayStack.html)

Deprecated.

Constructs a new empty ArrayStack with an initial size.

[asClosure(Transformer<? super E, ?>)](http://docs.google.com/org/apache/commons/collections4/ClosureUtils.html#asClosure-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.[ClosureUtils](http://docs.google.com/org/apache/commons/collections4/ClosureUtils.html)

Creates a Closure that calls a Transformer each time it is called.

[asEnumeration()](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html#asEnumeration--) - Method in class org.apache.commons.collections4.[FluentIterable](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html)

Returns an Enumeration that will enumerate all elements contained in this iterable.

[asEnumeration(Iterator<? extends E>)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#asEnumeration-java.util.Iterator-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets an enumeration that wraps an iterator.

[asIterable(Iterator<? extends E>)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#asIterable-java.util.Iterator-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets an [Iterable](https://docs.oracle.com/javase/7/docs/api/java/lang/Iterable.html?is-external=true) that wraps an iterator.

[asIterator(Enumeration<? extends E>)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#asIterator-java.util.Enumeration-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets an iterator that provides an iterator view of the given enumeration.

[asIterator(Enumeration<? extends E>, Collection<? super E>)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#asIterator-java.util.Enumeration-java.util.Collection-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets an iterator that provides an iterator view of the given enumeration that will remove elements from the specified collection.

[asList()](http://docs.google.com/org/apache/commons/collections4/map/LinkedMap.html#asList--) - Method in class org.apache.commons.collections4.map.[LinkedMap](http://docs.google.com/org/apache/commons/collections4/map/LinkedMap.html)

Gets an unmodifiable List view of the keys.

[asList()](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html#asList--) - Method in class org.apache.commons.collections4.map.[ListOrderedMap](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html)

Gets an unmodifiable List view of the keys which changes as the map changes.

[asList()](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html#asList--) - Method in class org.apache.commons.collections4.set.[ListOrderedSet](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html)

Gets an unmodifiable view of the order of the Set.

[asMap()](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html#asMap--) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html)   [asMap()](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html#asMap--) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMapDecorator](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html)   [asMap()](http://docs.google.com/org/apache/commons/collections4/multimap/UnmodifiableMultiValuedMap.html#asMap--) - Method in class org.apache.commons.collections4.multimap.[UnmodifiableMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/UnmodifiableMultiValuedMap.html)   [asMap()](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html#asMap--) - Method in interface org.apache.commons.collections4.[MultiValuedMap](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html)

Returns a view of this multi-valued map as a Map from each distinct key to the non-empty collection of that key's associated values.

[asMultipleUseIterable(Iterator<? extends E>)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#asMultipleUseIterable-java.util.Iterator-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets an iterable that wraps an iterator.

[asPredicate(Transformer<? super T, Boolean>)](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html#asPredicate-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.[PredicateUtils](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html)

Create a new Predicate that wraps a Transformer.

[asSet()](http://docs.google.com/org/apache/commons/collections4/list/SetUniqueList.html#asSet--) - Method in class org.apache.commons.collections4.list.[SetUniqueList](http://docs.google.com/org/apache/commons/collections4/list/SetUniqueList.html)

Gets an unmodifiable view as a Set.

[asTransformer(Closure<? super T>)](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html#asTransformer-org.apache.commons.collections4.Closure-) - Static method in class org.apache.commons.collections4.[TransformerUtils](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html)

Creates a Transformer that calls a Closure each time the transformer is used.

[asTransformer(Predicate<? super T>)](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html#asTransformer-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[TransformerUtils](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html)

Creates a Transformer that calls a Predicate each time the transformer is used.

[asTransformer(Factory<? extends O>)](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html#asTransformer-org.apache.commons.collections4.Factory-) - Static method in class org.apache.commons.collections4.[TransformerUtils](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html)

Creates a Transformer that calls a Factory each time the transformer is used.

[atomic(Runnable)](http://docs.google.com/org/apache/commons/collections4/map/StaticBucketMap.html#atomic-java.lang.Runnable-) - Method in class org.apache.commons.collections4.map.[StaticBucketMap](http://docs.google.com/org/apache/commons/collections4/map/StaticBucketMap.html)

Prevents any operations from occurring on this map while the given [Runnable](https://docs.oracle.com/javase/7/docs/api/java/lang/Runnable.html?is-external=true) executes.

## B

[Bag](http://docs.google.com/org/apache/commons/collections4/Bag.html)<[E](http://docs.google.com/org/apache/commons/collections4/Bag.html)> - Interface in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

Defines a collection that counts the number of times an object appears in the collection.

[BagUtils](http://docs.google.com/org/apache/commons/collections4/BagUtils.html) - Class in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

Provides utility methods and decorators for [Bag](http://docs.google.com/org/apache/commons/collections4/Bag.html) and [SortedBag](http://docs.google.com/org/apache/commons/collections4/SortedBag.html) instances.

[before](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkEntry.html#before) - Variable in class org.apache.commons.collections4.map.[AbstractLinkedMap.LinkEntry](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkEntry.html)

The entry before this one in the order

[BidiMap](http://docs.google.com/org/apache/commons/collections4/BidiMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/BidiMap.html),[V](http://docs.google.com/org/apache/commons/collections4/BidiMap.html)> - Interface in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

Defines a map that allows bidirectional lookup between key and values.

[BidiMapIterator(AbstractDualBidiMap<K, V>)](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.BidiMapIterator.html#BidiMapIterator-org.apache.commons.collections4.bidimap.AbstractDualBidiMap-) - Constructor for class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.BidiMapIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.BidiMapIterator.html)

Constructor.

[BidiOrderedMapIterator(AbstractDualBidiMap<K, V>)](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.BidiOrderedMapIterator.html#BidiOrderedMapIterator-org.apache.commons.collections4.bidimap.AbstractDualBidiMap-) - Constructor for class org.apache.commons.collections4.bidimap.[DualTreeBidiMap.BidiOrderedMapIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.BidiOrderedMapIterator.html)

Constructor.

[bitIndex(String, int, int, String, int, int)](http://docs.google.com/org/apache/commons/collections4/trie/analyzer/StringKeyAnalyzer.html#bitIndex-java.lang.String-int-int-java.lang.String-int-int-) - Method in class org.apache.commons.collections4.trie.analyzer.[StringKeyAnalyzer](http://docs.google.com/org/apache/commons/collections4/trie/analyzer/StringKeyAnalyzer.html)   [bitIndex(K, int, int, K, int, int)](http://docs.google.com/org/apache/commons/collections4/trie/KeyAnalyzer.html#bitIndex-K-int-int-K-int-int-) - Method in class org.apache.commons.collections4.trie.[KeyAnalyzer](http://docs.google.com/org/apache/commons/collections4/trie/KeyAnalyzer.html)

Returns the n-th different bit between key and other.

[bitsPerElement()](http://docs.google.com/org/apache/commons/collections4/trie/analyzer/StringKeyAnalyzer.html#bitsPerElement--) - Method in class org.apache.commons.collections4.trie.analyzer.[StringKeyAnalyzer](http://docs.google.com/org/apache/commons/collections4/trie/analyzer/StringKeyAnalyzer.html)   [bitsPerElement()](http://docs.google.com/org/apache/commons/collections4/trie/KeyAnalyzer.html#bitsPerElement--) - Method in class org.apache.commons.collections4.trie.[KeyAnalyzer](http://docs.google.com/org/apache/commons/collections4/trie/KeyAnalyzer.html)

Returns the number of bits per element in the key.

[BooleanComparator](http://docs.google.com/org/apache/commons/collections4/comparators/BooleanComparator.html) - Class in [org.apache.commons.collections4.comparators](http://docs.google.com/org/apache/commons/collections4/comparators/package-summary.html)

A [Comparator](https://docs.oracle.com/javase/7/docs/api/java/util/Comparator.html?is-external=true) for [Boolean](https://docs.oracle.com/javase/7/docs/api/java/lang/Boolean.html?is-external=true) objects that can sort either true or false first.

[BooleanComparator()](http://docs.google.com/org/apache/commons/collections4/comparators/BooleanComparator.html#BooleanComparator--) - Constructor for class org.apache.commons.collections4.comparators.[BooleanComparator](http://docs.google.com/org/apache/commons/collections4/comparators/BooleanComparator.html)

Creates a BooleanComparator that sorts false values before true values.

[BooleanComparator(boolean)](http://docs.google.com/org/apache/commons/collections4/comparators/BooleanComparator.html#BooleanComparator-boolean-) - Constructor for class org.apache.commons.collections4.comparators.[BooleanComparator](http://docs.google.com/org/apache/commons/collections4/comparators/BooleanComparator.html)

Creates a BooleanComparator that sorts *trueFirst* values before !*trueFirst* values.

[booleanComparator(boolean)](http://docs.google.com/org/apache/commons/collections4/comparators/BooleanComparator.html#booleanComparator-boolean-) - Static method in class org.apache.commons.collections4.comparators.[BooleanComparator](http://docs.google.com/org/apache/commons/collections4/comparators/BooleanComparator.html)

Returns a BooleanComparator instance that sorts *trueFirst* values before !*trueFirst* values.

[booleanComparator(boolean)](http://docs.google.com/org/apache/commons/collections4/ComparatorUtils.html#booleanComparator-boolean-) - Static method in class org.apache.commons.collections4.[ComparatorUtils](http://docs.google.com/org/apache/commons/collections4/ComparatorUtils.html)

Gets a Comparator that can sort Boolean objects.

[BoundedCollection](http://docs.google.com/org/apache/commons/collections4/BoundedCollection.html)<[E](http://docs.google.com/org/apache/commons/collections4/BoundedCollection.html)> - Interface in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

Defines a collection that is bounded in size.

[boundedIterable(Iterable<E>, long)](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#boundedIterable-java.lang.Iterable-long-) - Static method in class org.apache.commons.collections4.[IterableUtils](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html)

Returns a view of the given iterable that contains at most the given number of elements.

[BoundedIterator](http://docs.google.com/org/apache/commons/collections4/iterators/BoundedIterator.html)<[E](http://docs.google.com/org/apache/commons/collections4/iterators/BoundedIterator.html)> - Class in [org.apache.commons.collections4.iterators](http://docs.google.com/org/apache/commons/collections4/iterators/package-summary.html)

Decorates another iterator to return elements in a specific range.

[BoundedIterator(Iterator<? extends E>, long, long)](http://docs.google.com/org/apache/commons/collections4/iterators/BoundedIterator.html#BoundedIterator-java.util.Iterator-long-long-) - Constructor for class org.apache.commons.collections4.iterators.[BoundedIterator](http://docs.google.com/org/apache/commons/collections4/iterators/BoundedIterator.html)

Decorates the specified iterator to return at most the given number of elements, skipping all elements until the iterator reaches the position at offset.

[boundedIterator(Iterator<? extends E>, long)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#boundedIterator-java.util.Iterator-long-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Decorates the specified iterator to return at most the given number of elements.

[boundedIterator(Iterator<? extends E>, long, long)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#boundedIterator-java.util.Iterator-long-long-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Decorates the specified iterator to return at most the given number of elements, skipping all elements until the iterator reaches the position at offset.

[BoundedMap](http://docs.google.com/org/apache/commons/collections4/BoundedMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/BoundedMap.html),[V](http://docs.google.com/org/apache/commons/collections4/BoundedMap.html)> - Interface in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

Defines a map that is bounded in size.

[broadcastNodeChanged(AbstractLinkedList.Node<E>)](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.html#broadcastNodeChanged-org.apache.commons.collections4.list.AbstractLinkedList.Node-) - Method in class org.apache.commons.collections4.list.[CursorableLinkedList](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.html)

Informs all of my registered cursors that the specified element was changed.

[broadcastNodeInserted(AbstractLinkedList.Node<E>)](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.html#broadcastNodeInserted-org.apache.commons.collections4.list.AbstractLinkedList.Node-) - Method in class org.apache.commons.collections4.list.[CursorableLinkedList](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.html)

Informs all of my registered cursors that the specified element was just added to my list.

[broadcastNodeRemoved(AbstractLinkedList.Node<E>)](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.html#broadcastNodeRemoved-org.apache.commons.collections4.list.AbstractLinkedList.Node-) - Method in class org.apache.commons.collections4.list.[CursorableLinkedList](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.html)

Informs all of my registered cursors that the specified element was just removed from my list.

[builder(Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.html#builder-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.collection.[PredicatedCollection](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.html)

Returns a Builder with the given predicate.

[Builder(Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.Builder.html#Builder-org.apache.commons.collections4.Predicate-) - Constructor for class org.apache.commons.collections4.collection.[PredicatedCollection.Builder](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.Builder.html)

Constructs a PredicatedCollectionBuilder with the specified Predicate.

## C

[calculateNewCapacity(int)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#calculateNewCapacity-int-) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Calculates the new capacity of the map.

[calculateThreshold(int, float)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#calculateThreshold-int-float-) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Calculates the new threshold of the map, where it will be resized.

[canRemove](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.BidiMapIterator.html#canRemove) - Variable in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.BidiMapIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.BidiMapIterator.html)

Whether remove is allowed at present

[canRemove](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.EntrySetIterator.html#canRemove) - Variable in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.EntrySetIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.EntrySetIterator.html)

Whether remove is allowed at present

[canRemove](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.KeySetIterator.html#canRemove) - Variable in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.KeySetIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.KeySetIterator.html)

Whether remove is allowed at present

[canRemove](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.ValuesIterator.html#canRemove) - Variable in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.ValuesIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.ValuesIterator.html)

Whether remove is allowed at present

[canRemove](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.EntrySetIterator.html#canRemove) - Variable in class org.apache.commons.collections4.multiset.[AbstractMapMultiSet.EntrySetIterator](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.EntrySetIterator.html)

Whether remove is allowed at present

[canRemove](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.UniqueSetIterator.html#canRemove) - Variable in class org.apache.commons.collections4.multiset.[AbstractMapMultiSet.UniqueSetIterator](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.UniqueSetIterator.html)

Whether remove is allowed at present

[cardinality(O, Iterable<? super O>)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#cardinality-O-java.lang.Iterable-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Deprecated.

since 4.1, use [IterableUtils.frequency(Iterable, Object)](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#frequency-java.lang.Iterable-T-) instead. Be aware that the order of parameters has changed.

[CaseInsensitiveMap](http://docs.google.com/org/apache/commons/collections4/map/CaseInsensitiveMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/CaseInsensitiveMap.html),[V](http://docs.google.com/org/apache/commons/collections4/map/CaseInsensitiveMap.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

A case-insensitive Map.

[CaseInsensitiveMap()](http://docs.google.com/org/apache/commons/collections4/map/CaseInsensitiveMap.html#CaseInsensitiveMap--) - Constructor for class org.apache.commons.collections4.map.[CaseInsensitiveMap](http://docs.google.com/org/apache/commons/collections4/map/CaseInsensitiveMap.html)

Constructs a new empty map with default size and load factor.

[CaseInsensitiveMap(int)](http://docs.google.com/org/apache/commons/collections4/map/CaseInsensitiveMap.html#CaseInsensitiveMap-int-) - Constructor for class org.apache.commons.collections4.map.[CaseInsensitiveMap](http://docs.google.com/org/apache/commons/collections4/map/CaseInsensitiveMap.html)

Constructs a new, empty map with the specified initial capacity.

[CaseInsensitiveMap(int, float)](http://docs.google.com/org/apache/commons/collections4/map/CaseInsensitiveMap.html#CaseInsensitiveMap-int-float-) - Constructor for class org.apache.commons.collections4.map.[CaseInsensitiveMap](http://docs.google.com/org/apache/commons/collections4/map/CaseInsensitiveMap.html)

Constructs a new, empty map with the specified initial capacity and load factor.

[CaseInsensitiveMap(Map<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/CaseInsensitiveMap.html#CaseInsensitiveMap-java.util.Map-) - Constructor for class org.apache.commons.collections4.map.[CaseInsensitiveMap](http://docs.google.com/org/apache/commons/collections4/map/CaseInsensitiveMap.html)

Constructor copying elements from another map.

[CatchAndRethrowClosure](http://docs.google.com/org/apache/commons/collections4/functors/CatchAndRethrowClosure.html)<[E](http://docs.google.com/org/apache/commons/collections4/functors/CatchAndRethrowClosure.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

[Closure](http://docs.google.com/org/apache/commons/collections4/Closure.html) that catches any checked exception and re-throws it as a [FunctorException](http://docs.google.com/org/apache/commons/collections4/FunctorException.html) runtime exception.

[CatchAndRethrowClosure()](http://docs.google.com/org/apache/commons/collections4/functors/CatchAndRethrowClosure.html#CatchAndRethrowClosure--) - Constructor for class org.apache.commons.collections4.functors.[CatchAndRethrowClosure](http://docs.google.com/org/apache/commons/collections4/functors/CatchAndRethrowClosure.html)   [ceiling(E)](http://docs.google.com/org/apache/commons/collections4/set/AbstractNavigableSetDecorator.html#ceiling-E-) - Method in class org.apache.commons.collections4.set.[AbstractNavigableSetDecorator](http://docs.google.com/org/apache/commons/collections4/set/AbstractNavigableSetDecorator.html)   [ceiling(E)](http://docs.google.com/org/apache/commons/collections4/set/PredicatedNavigableSet.html#ceiling-E-) - Method in class org.apache.commons.collections4.set.[PredicatedNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/PredicatedNavigableSet.html)   [ceiling(E)](http://docs.google.com/org/apache/commons/collections4/set/TransformedNavigableSet.html#ceiling-E-) - Method in class org.apache.commons.collections4.set.[TransformedNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/TransformedNavigableSet.html)   [chainedClosure(Closure<? super E>...)](http://docs.google.com/org/apache/commons/collections4/ClosureUtils.html#chainedClosure-org.apache.commons.collections4.Closure...-) - Static method in class org.apache.commons.collections4.[ClosureUtils](http://docs.google.com/org/apache/commons/collections4/ClosureUtils.html)

Create a new Closure that calls each closure in turn, passing the result into the next closure.

[chainedClosure(Collection<? extends Closure<? super E>>)](http://docs.google.com/org/apache/commons/collections4/ClosureUtils.html#chainedClosure-java.util.Collection-) - Static method in class org.apache.commons.collections4.[ClosureUtils](http://docs.google.com/org/apache/commons/collections4/ClosureUtils.html)

Create a new Closure that calls each closure in turn, passing the result into the next closure.

[ChainedClosure](http://docs.google.com/org/apache/commons/collections4/functors/ChainedClosure.html)<[E](http://docs.google.com/org/apache/commons/collections4/functors/ChainedClosure.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Closure implementation that chains the specified closures together.

[ChainedClosure(Closure<? super E>...)](http://docs.google.com/org/apache/commons/collections4/functors/ChainedClosure.html#ChainedClosure-org.apache.commons.collections4.Closure...-) - Constructor for class org.apache.commons.collections4.functors.[ChainedClosure](http://docs.google.com/org/apache/commons/collections4/functors/ChainedClosure.html)

Constructor that performs no validation.

[chainedClosure(Closure<? super E>...)](http://docs.google.com/org/apache/commons/collections4/functors/ChainedClosure.html#chainedClosure-org.apache.commons.collections4.Closure...-) - Static method in class org.apache.commons.collections4.functors.[ChainedClosure](http://docs.google.com/org/apache/commons/collections4/functors/ChainedClosure.html)

Factory method that performs validation and copies the parameter array.

[chainedClosure(Collection<? extends Closure<? super E>>)](http://docs.google.com/org/apache/commons/collections4/functors/ChainedClosure.html#chainedClosure-java.util.Collection-) - Static method in class org.apache.commons.collections4.functors.[ChainedClosure](http://docs.google.com/org/apache/commons/collections4/functors/ChainedClosure.html)

Create a new Closure that calls each closure in turn, passing the result into the next closure.

[chainedComparator(Comparator<E>...)](http://docs.google.com/org/apache/commons/collections4/ComparatorUtils.html#chainedComparator-java.util.Comparator...-) - Static method in class org.apache.commons.collections4.[ComparatorUtils](http://docs.google.com/org/apache/commons/collections4/ComparatorUtils.html)

Gets a comparator that compares using an array of [Comparator](https://docs.oracle.com/javase/7/docs/api/java/util/Comparator.html?is-external=true)s, applied in sequence until one returns not equal or the array is exhausted.

[chainedComparator(Collection<Comparator<E>>)](http://docs.google.com/org/apache/commons/collections4/ComparatorUtils.html#chainedComparator-java.util.Collection-) - Static method in class org.apache.commons.collections4.[ComparatorUtils](http://docs.google.com/org/apache/commons/collections4/ComparatorUtils.html)

Gets a comparator that compares using a collection of [Comparator](https://docs.oracle.com/javase/7/docs/api/java/util/Comparator.html?is-external=true)s, applied in (default iterator) sequence until one returns not equal or the collection is exhausted.

[chainedIterable(Iterable<? extends E>, Iterable<? extends E>)](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#chainedIterable-java.lang.Iterable-java.lang.Iterable-) - Static method in class org.apache.commons.collections4.[IterableUtils](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html)

Combines two iterables into a single iterable.

[chainedIterable(Iterable<? extends E>, Iterable<? extends E>, Iterable<? extends E>)](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#chainedIterable-java.lang.Iterable-java.lang.Iterable-java.lang.Iterable-) - Static method in class org.apache.commons.collections4.[IterableUtils](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html)

Combines three iterables into a single iterable.

[chainedIterable(Iterable<? extends E>, Iterable<? extends E>, Iterable<? extends E>, Iterable<? extends E>)](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#chainedIterable-java.lang.Iterable-java.lang.Iterable-java.lang.Iterable-java.lang.Iterable-) - Static method in class org.apache.commons.collections4.[IterableUtils](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html)

Combines four iterables into a single iterable.

[chainedIterable(Iterable<? extends E>...)](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#chainedIterable-java.lang.Iterable...-) - Static method in class org.apache.commons.collections4.[IterableUtils](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html)

Combines the provided iterables into a single iterable.

[chainedIterator(Iterator<? extends E>, Iterator<? extends E>)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#chainedIterator-java.util.Iterator-java.util.Iterator-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets an iterator that iterates through two [Iterator](https://docs.oracle.com/javase/7/docs/api/java/util/Iterator.html?is-external=true)s one after another.

[chainedIterator(Iterator<? extends E>...)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#chainedIterator-java.util.Iterator...-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets an iterator that iterates through an array of [Iterator](https://docs.oracle.com/javase/7/docs/api/java/util/Iterator.html?is-external=true)s one after another.

[chainedIterator(Collection<Iterator<? extends E>>)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#chainedIterator-java.util.Collection-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets an iterator that iterates through a collections of [Iterator](https://docs.oracle.com/javase/7/docs/api/java/util/Iterator.html?is-external=true)s one after another.

[ChainedTransformer](http://docs.google.com/org/apache/commons/collections4/functors/ChainedTransformer.html)<[T](http://docs.google.com/org/apache/commons/collections4/functors/ChainedTransformer.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Transformer implementation that chains the specified transformers together.

[ChainedTransformer(Transformer<? super T, ? extends T>...)](http://docs.google.com/org/apache/commons/collections4/functors/ChainedTransformer.html#ChainedTransformer-org.apache.commons.collections4.Transformer...-) - Constructor for class org.apache.commons.collections4.functors.[ChainedTransformer](http://docs.google.com/org/apache/commons/collections4/functors/ChainedTransformer.html)

Constructor that performs no validation.

[chainedTransformer(Transformer<? super T, ? extends T>...)](http://docs.google.com/org/apache/commons/collections4/functors/ChainedTransformer.html#chainedTransformer-org.apache.commons.collections4.Transformer...-) - Static method in class org.apache.commons.collections4.functors.[ChainedTransformer](http://docs.google.com/org/apache/commons/collections4/functors/ChainedTransformer.html)

Factory method that performs validation and copies the parameter array.

[chainedTransformer(Collection<? extends Transformer<? super T, ? extends T>>)](http://docs.google.com/org/apache/commons/collections4/functors/ChainedTransformer.html#chainedTransformer-java.util.Collection-) - Static method in class org.apache.commons.collections4.functors.[ChainedTransformer](http://docs.google.com/org/apache/commons/collections4/functors/ChainedTransformer.html)

Create a new Transformer that calls each transformer in turn, passing the result into the next transformer.

[chainedTransformer(Transformer<? super T, ? extends T>...)](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html#chainedTransformer-org.apache.commons.collections4.Transformer...-) - Static method in class org.apache.commons.collections4.[TransformerUtils](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html)

Create a new Transformer that calls each transformer in turn, passing the result into the next transformer.

[chainedTransformer(Collection<? extends Transformer<? super T, ? extends T>>)](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html#chainedTransformer-java.util.Collection-) - Static method in class org.apache.commons.collections4.[TransformerUtils](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html)

Create a new Transformer that calls each transformer in turn, passing the result into the next transformer.

[checkBound(int, int, String)](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayIterator.html#checkBound-int-int-java.lang.String-) - Method in class org.apache.commons.collections4.iterators.[ArrayIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayIterator.html)

Checks whether the index is valid or not.

[checkCapacity()](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#checkCapacity--) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Checks the capacity of the map and enlarges it if necessary.

[checkKey(MultiKey<?>)](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html#checkKey-org.apache.commons.collections4.keyvalue.MultiKey-) - Method in class org.apache.commons.collections4.map.[MultiKeyMap](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html)

Check to ensure that input keys are valid MultiKey objects.

[checkLocked()](http://docs.google.com/org/apache/commons/collections4/comparators/FixedOrderComparator.html#checkLocked--) - Method in class org.apache.commons.collections4.comparators.[FixedOrderComparator](http://docs.google.com/org/apache/commons/collections4/comparators/FixedOrderComparator.html)

Checks to see whether the comparator is now locked against further changes.

[checkModCount()](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedListIterator.html#checkModCount--) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList.LinkedListIterator](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedListIterator.html)

Checks the modification count of the list is the value that this object expects.

[checkModCount()](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedSubList.html#checkModCount--) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList.LinkedSubList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedSubList.html)   [checkModCount()](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.Cursor.html#checkModCount--) - Method in class org.apache.commons.collections4.list.[CursorableLinkedList.Cursor](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.Cursor.html)

Override superclass modCount check, and replace it with our valid flag.

[checkSetValue(V)](http://docs.google.com/org/apache/commons/collections4/map/PredicatedMap.html#checkSetValue-V-) - Method in class org.apache.commons.collections4.map.[PredicatedMap](http://docs.google.com/org/apache/commons/collections4/map/PredicatedMap.html)

Override to validate an object set into the map via setValue.

[checkSetValue(V)](http://docs.google.com/org/apache/commons/collections4/map/TransformedMap.html#checkSetValue-V-) - Method in class org.apache.commons.collections4.map.[TransformedMap](http://docs.google.com/org/apache/commons/collections4/map/TransformedMap.html)

Override to transform the value when using setValue.

[checkSetValue(U)](http://docs.google.com/org/apache/commons/collections4/splitmap/TransformedSplitMap.html#checkSetValue-U-) - Method in class org.apache.commons.collections4.splitmap.[TransformedSplitMap](http://docs.google.com/org/apache/commons/collections4/splitmap/TransformedSplitMap.html)

Override to transform the value when using setValue.

[CircularFifoQueue](http://docs.google.com/org/apache/commons/collections4/queue/CircularFifoQueue.html)<[E](http://docs.google.com/org/apache/commons/collections4/queue/CircularFifoQueue.html)> - Class in [org.apache.commons.collections4.queue](http://docs.google.com/org/apache/commons/collections4/queue/package-summary.html)

CircularFifoQueue is a first-in first-out queue with a fixed size that replaces its oldest element if full.

[CircularFifoQueue()](http://docs.google.com/org/apache/commons/collections4/queue/CircularFifoQueue.html#CircularFifoQueue--) - Constructor for class org.apache.commons.collections4.queue.[CircularFifoQueue](http://docs.google.com/org/apache/commons/collections4/queue/CircularFifoQueue.html)

Constructor that creates a queue with the default size of 32.

[CircularFifoQueue(int)](http://docs.google.com/org/apache/commons/collections4/queue/CircularFifoQueue.html#CircularFifoQueue-int-) - Constructor for class org.apache.commons.collections4.queue.[CircularFifoQueue](http://docs.google.com/org/apache/commons/collections4/queue/CircularFifoQueue.html)

Constructor that creates a queue with the specified size.

[CircularFifoQueue(Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/queue/CircularFifoQueue.html#CircularFifoQueue-java.util.Collection-) - Constructor for class org.apache.commons.collections4.queue.[CircularFifoQueue](http://docs.google.com/org/apache/commons/collections4/queue/CircularFifoQueue.html)

Constructor that creates a queue from the specified collection.

[clear()](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html#clear--) - Method in class org.apache.commons.collections4.bag.[AbstractMapBag](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html)

Clears the bag by clearing the underlying map.

[clear()](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableBag.html#clear--) - Method in class org.apache.commons.collections4.bag.[UnmodifiableBag](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableBag.html)   [clear()](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableSortedBag.html#clear--) - Method in class org.apache.commons.collections4.bag.[UnmodifiableSortedBag](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableSortedBag.html)   [clear()](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html#clear--) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html)   [clear()](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.View.html#clear--) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.View](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.View.html)   [clear()](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.ViewMap.html#clear--) - Method in class org.apache.commons.collections4.bidimap.[DualTreeBidiMap.ViewMap](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.ViewMap.html)   [clear()](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html#clear--) - Method in class org.apache.commons.collections4.bidimap.[TreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html)

Removes all mappings from this map.

[clear()](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableBidiMap.html#clear--) - Method in class org.apache.commons.collections4.bidimap.[UnmodifiableBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableBidiMap.html)   [clear()](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableOrderedBidiMap.html#clear--) - Method in class org.apache.commons.collections4.bidimap.[UnmodifiableOrderedBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableOrderedBidiMap.html)   [clear()](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableSortedBidiMap.html#clear--) - Method in class org.apache.commons.collections4.bidimap.[UnmodifiableSortedBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableSortedBidiMap.html)   [clear()](http://docs.google.com/org/apache/commons/collections4/collection/AbstractCollectionDecorator.html#clear--) - Method in class org.apache.commons.collections4.collection.[AbstractCollectionDecorator](http://docs.google.com/org/apache/commons/collections4/collection/AbstractCollectionDecorator.html)   [clear()](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html#clear--) - Method in class org.apache.commons.collections4.collection.[CompositeCollection](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html)

Removes all of the elements from this collection .

[clear()](http://docs.google.com/org/apache/commons/collections4/collection/IndexedCollection.html#clear--) - Method in class org.apache.commons.collections4.collection.[IndexedCollection](http://docs.google.com/org/apache/commons/collections4/collection/IndexedCollection.html)   [clear()](http://docs.google.com/org/apache/commons/collections4/collection/SynchronizedCollection.html#clear--) - Method in class org.apache.commons.collections4.collection.[SynchronizedCollection](http://docs.google.com/org/apache/commons/collections4/collection/SynchronizedCollection.html)   [clear()](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableBoundedCollection.html#clear--) - Method in class org.apache.commons.collections4.collection.[UnmodifiableBoundedCollection](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableBoundedCollection.html)   [clear()](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableCollection.html#clear--) - Method in class org.apache.commons.collections4.collection.[UnmodifiableCollection](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableCollection.html)   [clear()](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#clear--) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)   [clear()](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedSubList.html#clear--) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList.LinkedSubList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedSubList.html)   [clear()](http://docs.google.com/org/apache/commons/collections4/list/FixedSizeList.html#clear--) - Method in class org.apache.commons.collections4.list.[FixedSizeList](http://docs.google.com/org/apache/commons/collections4/list/FixedSizeList.html)   [clear()](http://docs.google.com/org/apache/commons/collections4/list/SetUniqueList.html#clear--) - Method in class org.apache.commons.collections4.list.[SetUniqueList](http://docs.google.com/org/apache/commons/collections4/list/SetUniqueList.html)   [clear()](http://docs.google.com/org/apache/commons/collections4/list/TreeList.html#clear--) - Method in class org.apache.commons.collections4.list.[TreeList](http://docs.google.com/org/apache/commons/collections4/list/TreeList.html)

Clears the list, removing all entries.

[clear()](http://docs.google.com/org/apache/commons/collections4/list/UnmodifiableList.html#clear--) - Method in class org.apache.commons.collections4.list.[UnmodifiableList](http://docs.google.com/org/apache/commons/collections4/list/UnmodifiableList.html)   [clear()](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#clear--) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Clears the map, resetting the size to zero and nullifying references to avoid garbage collection issues.

[clear()](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.EntrySet.html#clear--) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap.EntrySet](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.EntrySet.html)   [clear()](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySet.html#clear--) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap.KeySet](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySet.html)   [clear()](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.Values.html#clear--) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap.Values](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.Values.html)   [clear()](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html#clear--) - Method in class org.apache.commons.collections4.map.[AbstractLinkedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html)

Clears the map, resetting the size to zero and nullifying references to avoid garbage collection issues.

[clear()](http://docs.google.com/org/apache/commons/collections4/map/AbstractMapDecorator.html#clear--) - Method in class org.apache.commons.collections4.map.[AbstractMapDecorator](http://docs.google.com/org/apache/commons/collections4/map/AbstractMapDecorator.html)   [clear()](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html#clear--) - Method in class org.apache.commons.collections4.map.[AbstractReferenceMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html)

Clears this map.

[clear()](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html#clear--) - Method in class org.apache.commons.collections4.map.[CompositeMap](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html)

Calls clear() on all composited Maps.

[clear()](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeMap.html#clear--) - Method in class org.apache.commons.collections4.map.[FixedSizeMap](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeMap.html)   [clear()](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeSortedMap.html#clear--) - Method in class org.apache.commons.collections4.map.[FixedSizeSortedMap](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeSortedMap.html)   [clear()](http://docs.google.com/org/apache/commons/collections4/map/Flat3Map.html#clear--) - Method in class org.apache.commons.collections4.map.[Flat3Map](http://docs.google.com/org/apache/commons/collections4/map/Flat3Map.html)

Clears the map, resetting the size to zero and nullifying references to avoid garbage collection issues.

[clear()](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html#clear--) - Method in class org.apache.commons.collections4.map.[ListOrderedMap](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html)   [clear()](http://docs.google.com/org/apache/commons/collections4/map/MultiValueMap.html#clear--) - Method in class org.apache.commons.collections4.map.[MultiValueMap](http://docs.google.com/org/apache/commons/collections4/map/MultiValueMap.html)

Deprecated.

Clear the map.

[clear()](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.html#clear--) - Method in class org.apache.commons.collections4.map.[PassiveExpiringMap](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.html)

Normal [Map.clear()](https://docs.oracle.com/javase/7/docs/api/java/util/Map.html?is-external=true#clear--) behavior with the addition of clearing all expiration entries as well.

[clear()](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html#clear--) - Method in class org.apache.commons.collections4.map.[SingletonMap](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html)

Unsupported operation.

[clear()](http://docs.google.com/org/apache/commons/collections4/map/StaticBucketMap.html#clear--) - Method in class org.apache.commons.collections4.map.[StaticBucketMap](http://docs.google.com/org/apache/commons/collections4/map/StaticBucketMap.html)

Clears the map of all entries.

[clear()](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableEntrySet.html#clear--) - Method in class org.apache.commons.collections4.map.[UnmodifiableEntrySet](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableEntrySet.html)   [clear()](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableMap.html#clear--) - Method in class org.apache.commons.collections4.map.[UnmodifiableMap](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableMap.html)   [clear()](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableOrderedMap.html#clear--) - Method in class org.apache.commons.collections4.map.[UnmodifiableOrderedMap](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableOrderedMap.html)   [clear()](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableSortedMap.html#clear--) - Method in class org.apache.commons.collections4.map.[UnmodifiableSortedMap](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableSortedMap.html)   [clear()](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html#clear--) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html)   [clear()](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html#clear--) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMapDecorator](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html)   [clear()](http://docs.google.com/org/apache/commons/collections4/multimap/UnmodifiableMultiValuedMap.html#clear--) - Method in class org.apache.commons.collections4.multimap.[UnmodifiableMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/UnmodifiableMultiValuedMap.html)   [clear()](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.html#clear--) - Method in class org.apache.commons.collections4.multiset.[AbstractMapMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.html)

Clears the multiset by clearing the underlying map.

[clear()](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html#clear--) - Method in class org.apache.commons.collections4.multiset.[AbstractMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html)

Clears the multiset removing all elements from the entrySet.

[clear()](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.UniqueSet.html#clear--) - Method in class org.apache.commons.collections4.multiset.[AbstractMultiSet.UniqueSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.UniqueSet.html)   [clear()](http://docs.google.com/org/apache/commons/collections4/multiset/UnmodifiableMultiSet.html#clear--) - Method in class org.apache.commons.collections4.multiset.[UnmodifiableMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/UnmodifiableMultiSet.html)   [clear()](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html#clear--) - Method in interface org.apache.commons.collections4.[MultiValuedMap](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html)

Removes all of the mappings from this map (optional operation).

[clear()](http://docs.google.com/org/apache/commons/collections4/Put.html#clear--) - Method in interface org.apache.commons.collections4.[Put](http://docs.google.com/org/apache/commons/collections4/Put.html)   [clear()](http://docs.google.com/org/apache/commons/collections4/queue/CircularFifoQueue.html#clear--) - Method in class org.apache.commons.collections4.queue.[CircularFifoQueue](http://docs.google.com/org/apache/commons/collections4/queue/CircularFifoQueue.html)

Clears this queue.

[clear()](http://docs.google.com/org/apache/commons/collections4/queue/UnmodifiableQueue.html#clear--) - Method in class org.apache.commons.collections4.queue.[UnmodifiableQueue](http://docs.google.com/org/apache/commons/collections4/queue/UnmodifiableQueue.html)   [clear()](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html#clear--) - Method in class org.apache.commons.collections4.set.[CompositeSet](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html)

Removes all of the elements from this composite set.

[clear()](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html#clear--) - Method in class org.apache.commons.collections4.set.[ListOrderedSet](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html)   [clear()](http://docs.google.com/org/apache/commons/collections4/set/MapBackedSet.html#clear--) - Method in class org.apache.commons.collections4.set.[MapBackedSet](http://docs.google.com/org/apache/commons/collections4/set/MapBackedSet.html)   [clear()](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableNavigableSet.html#clear--) - Method in class org.apache.commons.collections4.set.[UnmodifiableNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableNavigableSet.html)   [clear()](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableSet.html#clear--) - Method in class org.apache.commons.collections4.set.[UnmodifiableSet](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableSet.html)   [clear()](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableSortedSet.html#clear--) - Method in class org.apache.commons.collections4.set.[UnmodifiableSortedSet](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableSortedSet.html)   [clear()](http://docs.google.com/org/apache/commons/collections4/splitmap/TransformedSplitMap.html#clear--) - Method in class org.apache.commons.collections4.splitmap.[TransformedSplitMap](http://docs.google.com/org/apache/commons/collections4/splitmap/TransformedSplitMap.html)   [clear()](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html#clear--) - Method in class org.apache.commons.collections4.trie.[UnmodifiableTrie](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html)   [clone()](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#clone--) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Clones the map without cloning the keys or values.

[clone()](http://docs.google.com/org/apache/commons/collections4/map/CaseInsensitiveMap.html#clone--) - Method in class org.apache.commons.collections4.map.[CaseInsensitiveMap](http://docs.google.com/org/apache/commons/collections4/map/CaseInsensitiveMap.html)

Clones the map without cloning the keys or values.

[clone()](http://docs.google.com/org/apache/commons/collections4/map/Flat3Map.html#clone--) - Method in class org.apache.commons.collections4.map.[Flat3Map](http://docs.google.com/org/apache/commons/collections4/map/Flat3Map.html)

Clones the map without cloning the keys or values.

[clone()](http://docs.google.com/org/apache/commons/collections4/map/HashedMap.html#clone--) - Method in class org.apache.commons.collections4.map.[HashedMap](http://docs.google.com/org/apache/commons/collections4/map/HashedMap.html)

Clones the map without cloning the keys or values.

[clone()](http://docs.google.com/org/apache/commons/collections4/map/LinkedMap.html#clone--) - Method in class org.apache.commons.collections4.map.[LinkedMap](http://docs.google.com/org/apache/commons/collections4/map/LinkedMap.html)

Clones the map without cloning the keys or values.

[clone()](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html#clone--) - Method in class org.apache.commons.collections4.map.[LRUMap](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html)

Clones the map without cloning the keys or values.

[clone()](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html#clone--) - Method in class org.apache.commons.collections4.map.[MultiKeyMap](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html)

Clones the map without cloning the keys or values.

[clone()](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html#clone--) - Method in class org.apache.commons.collections4.map.[SingletonMap](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html)

Clones the map without cloning the key or value.

[CloneTransformer](http://docs.google.com/org/apache/commons/collections4/functors/CloneTransformer.html)<[T](http://docs.google.com/org/apache/commons/collections4/functors/CloneTransformer.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Transformer implementation that returns a clone of the input object.

[cloneTransformer()](http://docs.google.com/org/apache/commons/collections4/functors/CloneTransformer.html#cloneTransformer--) - Static method in class org.apache.commons.collections4.functors.[CloneTransformer](http://docs.google.com/org/apache/commons/collections4/functors/CloneTransformer.html)

Factory returning the singleton instance.

[cloneTransformer()](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html#cloneTransformer--) - Static method in class org.apache.commons.collections4.[TransformerUtils](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html)

Gets a transformer that returns a clone of the input object.

[close()](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.Cursor.html#close--) - Method in class org.apache.commons.collections4.list.[CursorableLinkedList.Cursor](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.Cursor.html)

Mark this cursor as no longer being needed.

[Closure](http://docs.google.com/org/apache/commons/collections4/Closure.html)<[T](http://docs.google.com/org/apache/commons/collections4/Closure.html)> - Interface in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

Defines a functor interface implemented by classes that do something.

[ClosureTransformer](http://docs.google.com/org/apache/commons/collections4/functors/ClosureTransformer.html)<[T](http://docs.google.com/org/apache/commons/collections4/functors/ClosureTransformer.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Transformer implementation that calls a Closure using the input object and then returns the input.

[ClosureTransformer(Closure<? super T>)](http://docs.google.com/org/apache/commons/collections4/functors/ClosureTransformer.html#ClosureTransformer-org.apache.commons.collections4.Closure-) - Constructor for class org.apache.commons.collections4.functors.[ClosureTransformer](http://docs.google.com/org/apache/commons/collections4/functors/ClosureTransformer.html)

Constructor that performs no validation.

[closureTransformer(Closure<? super T>)](http://docs.google.com/org/apache/commons/collections4/functors/ClosureTransformer.html#closureTransformer-org.apache.commons.collections4.Closure-) - Static method in class org.apache.commons.collections4.functors.[ClosureTransformer](http://docs.google.com/org/apache/commons/collections4/functors/ClosureTransformer.html)

Factory method that performs validation.

[ClosureUtils](http://docs.google.com/org/apache/commons/collections4/ClosureUtils.html) - Class in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

ClosureUtils provides reference implementations and utilities for the Closure functor interface.

[collate(Iterable<? extends O>, Iterable<? extends O>)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#collate-java.lang.Iterable-java.lang.Iterable-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Merges two sorted Collections, a and b, into a single, sorted List such that the natural ordering of the elements is retained.

[collate(Iterable<? extends O>, Iterable<? extends O>, boolean)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#collate-java.lang.Iterable-java.lang.Iterable-boolean-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Merges two sorted Collections, a and b, into a single, sorted List such that the natural ordering of the elements is retained.

[collate(Iterable<? extends O>, Iterable<? extends O>, Comparator<? super O>)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#collate-java.lang.Iterable-java.lang.Iterable-java.util.Comparator-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Merges two sorted Collections, a and b, into a single, sorted List such that the ordering of the elements according to Comparator c is retained.

[collate(Iterable<? extends O>, Iterable<? extends O>, Comparator<? super O>, boolean)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#collate-java.lang.Iterable-java.lang.Iterable-java.util.Comparator-boolean-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Merges two sorted Collections, a and b, into a single, sorted List such that the ordering of the elements according to Comparator c is retained.

[collate(Iterable<? extends E>)](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html#collate-java.lang.Iterable-) - Method in class org.apache.commons.collections4.[FluentIterable](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html)

Returns a new FluentIterable whose iterator will traverse the elements of the current and provided iterable in natural order.

[collate(Iterable<? extends E>, Comparator<? super E>)](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html#collate-java.lang.Iterable-java.util.Comparator-) - Method in class org.apache.commons.collections4.[FluentIterable](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html)

Returns a new FluentIterable whose iterator will traverse the elements of the current and provided iterable according to the ordering defined by an comparator.

[collatedIterable(Iterable<? extends E>, Iterable<? extends E>)](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#collatedIterable-java.lang.Iterable-java.lang.Iterable-) - Static method in class org.apache.commons.collections4.[IterableUtils](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html)

Combines the two provided iterables into an ordered iterable using natural ordering.

[collatedIterable(Comparator<? super E>, Iterable<? extends E>, Iterable<? extends E>)](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#collatedIterable-java.util.Comparator-java.lang.Iterable-java.lang.Iterable-) - Static method in class org.apache.commons.collections4.[IterableUtils](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html)

Combines the two provided iterables into an ordered iterable using the provided comparator.

[collatedIterator(Comparator<? super E>, Iterator<? extends E>, Iterator<? extends E>)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#collatedIterator-java.util.Comparator-java.util.Iterator-java.util.Iterator-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets an iterator that provides an ordered iteration over the elements contained in a collection of ordered [Iterator](https://docs.oracle.com/javase/7/docs/api/java/util/Iterator.html?is-external=true)s.

[collatedIterator(Comparator<? super E>, Iterator<? extends E>...)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#collatedIterator-java.util.Comparator-java.util.Iterator...-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets an iterator that provides an ordered iteration over the elements contained in an array of [Iterator](https://docs.oracle.com/javase/7/docs/api/java/util/Iterator.html?is-external=true)s.

[collatedIterator(Comparator<? super E>, Collection<Iterator<? extends E>>)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#collatedIterator-java.util.Comparator-java.util.Collection-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets an iterator that provides an ordered iteration over the elements contained in a collection of [Iterator](https://docs.oracle.com/javase/7/docs/api/java/util/Iterator.html?is-external=true)s.

[CollatingIterator](http://docs.google.com/org/apache/commons/collections4/iterators/CollatingIterator.html)<[E](http://docs.google.com/org/apache/commons/collections4/iterators/CollatingIterator.html)> - Class in [org.apache.commons.collections4.iterators](http://docs.google.com/org/apache/commons/collections4/iterators/package-summary.html)

Provides an ordered iteration over the elements contained in a collection of ordered Iterators.

[CollatingIterator()](http://docs.google.com/org/apache/commons/collections4/iterators/CollatingIterator.html#CollatingIterator--) - Constructor for class org.apache.commons.collections4.iterators.[CollatingIterator](http://docs.google.com/org/apache/commons/collections4/iterators/CollatingIterator.html)

Constructs a new CollatingIterator.

[CollatingIterator(Comparator<? super E>)](http://docs.google.com/org/apache/commons/collections4/iterators/CollatingIterator.html#CollatingIterator-java.util.Comparator-) - Constructor for class org.apache.commons.collections4.iterators.[CollatingIterator](http://docs.google.com/org/apache/commons/collections4/iterators/CollatingIterator.html)

Constructs a new CollatingIterator that will used the specified comparator for ordering.

[CollatingIterator(Comparator<? super E>, int)](http://docs.google.com/org/apache/commons/collections4/iterators/CollatingIterator.html#CollatingIterator-java.util.Comparator-int-) - Constructor for class org.apache.commons.collections4.iterators.[CollatingIterator](http://docs.google.com/org/apache/commons/collections4/iterators/CollatingIterator.html)

Constructs a new CollatingIterator that will used the specified comparator for ordering and have the specified initial capacity.

[CollatingIterator(Comparator<? super E>, Iterator<? extends E>, Iterator<? extends E>)](http://docs.google.com/org/apache/commons/collections4/iterators/CollatingIterator.html#CollatingIterator-java.util.Comparator-java.util.Iterator-java.util.Iterator-) - Constructor for class org.apache.commons.collections4.iterators.[CollatingIterator](http://docs.google.com/org/apache/commons/collections4/iterators/CollatingIterator.html)

Constructs a new CollatingIterator that will use the specified comparator to provide ordered iteration over the two given iterators.

[CollatingIterator(Comparator<? super E>, Iterator<? extends E>[])](http://docs.google.com/org/apache/commons/collections4/iterators/CollatingIterator.html#CollatingIterator-java.util.Comparator-java.util.Iterator:A-) - Constructor for class org.apache.commons.collections4.iterators.[CollatingIterator](http://docs.google.com/org/apache/commons/collections4/iterators/CollatingIterator.html)

Constructs a new CollatingIterator that will use the specified comparator to provide ordered iteration over the array of iterators.

[CollatingIterator(Comparator<? super E>, Collection<Iterator<? extends E>>)](http://docs.google.com/org/apache/commons/collections4/iterators/CollatingIterator.html#CollatingIterator-java.util.Comparator-java.util.Collection-) - Constructor for class org.apache.commons.collections4.iterators.[CollatingIterator](http://docs.google.com/org/apache/commons/collections4/iterators/CollatingIterator.html)

Constructs a new CollatingIterator that will use the specified comparator to provide ordered iteration over the collection of iterators.

[collect(Iterable<I>, Transformer<? super I, ? extends O>)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#collect-java.lang.Iterable-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Returns a new Collection containing all elements of the input collection transformed by the given transformer.

[collect(Iterator<I>, Transformer<? super I, ? extends O>)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#collect-java.util.Iterator-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Transforms all elements from the input iterator with the given transformer and adds them to the output collection.

[collect(Iterable<? extends I>, Transformer<? super I, ? extends O>, R)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#collect-java.lang.Iterable-org.apache.commons.collections4.Transformer-R-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Transforms all elements from input collection with the given transformer and adds them to the output collection.

[collect(Iterator<? extends I>, Transformer<? super I, ? extends O>, R)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#collect-java.util.Iterator-org.apache.commons.collections4.Transformer-R-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Transforms all elements from the input iterator with the given transformer and adds them to the output collection.

[CollectionBag](http://docs.google.com/org/apache/commons/collections4/bag/CollectionBag.html)<[E](http://docs.google.com/org/apache/commons/collections4/bag/CollectionBag.html)> - Class in [org.apache.commons.collections4.bag](http://docs.google.com/org/apache/commons/collections4/bag/package-summary.html)

Decorates another [Bag](http://docs.google.com/org/apache/commons/collections4/Bag.html) to comply with the Collection contract.

[CollectionBag(Bag<E>)](http://docs.google.com/org/apache/commons/collections4/bag/CollectionBag.html#CollectionBag-org.apache.commons.collections4.Bag-) - Constructor for class org.apache.commons.collections4.bag.[CollectionBag](http://docs.google.com/org/apache/commons/collections4/bag/CollectionBag.html)

Constructor that wraps (not copies).

[collectionBag(Bag<E>)](http://docs.google.com/org/apache/commons/collections4/bag/CollectionBag.html#collectionBag-org.apache.commons.collections4.Bag-) - Static method in class org.apache.commons.collections4.bag.[CollectionBag](http://docs.google.com/org/apache/commons/collections4/bag/CollectionBag.html)

Factory method to create a bag that complies to the Collection contract.

[collectionBag(Bag<E>)](http://docs.google.com/org/apache/commons/collections4/BagUtils.html#collectionBag-org.apache.commons.collections4.Bag-) - Static method in class org.apache.commons.collections4.[BagUtils](http://docs.google.com/org/apache/commons/collections4/BagUtils.html)

Returns a bag that complies to the Collection contract, backed by the given bag.

[CollectionSortedBag](http://docs.google.com/org/apache/commons/collections4/bag/CollectionSortedBag.html)<[E](http://docs.google.com/org/apache/commons/collections4/bag/CollectionSortedBag.html)> - Class in [org.apache.commons.collections4.bag](http://docs.google.com/org/apache/commons/collections4/bag/package-summary.html)

Decorates another [SortedBag](http://docs.google.com/org/apache/commons/collections4/SortedBag.html) to comply with the Collection contract.

[CollectionSortedBag(SortedBag<E>)](http://docs.google.com/org/apache/commons/collections4/bag/CollectionSortedBag.html#CollectionSortedBag-org.apache.commons.collections4.SortedBag-) - Constructor for class org.apache.commons.collections4.bag.[CollectionSortedBag](http://docs.google.com/org/apache/commons/collections4/bag/CollectionSortedBag.html)

Constructor that wraps (not copies).

[collectionSortedBag(SortedBag<E>)](http://docs.google.com/org/apache/commons/collections4/bag/CollectionSortedBag.html#collectionSortedBag-org.apache.commons.collections4.SortedBag-) - Static method in class org.apache.commons.collections4.bag.[CollectionSortedBag](http://docs.google.com/org/apache/commons/collections4/bag/CollectionSortedBag.html)

Factory method to create a sorted bag that complies to the Collection contract.

[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html) - Class in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

Provides utility methods and decorators for [Collection](https://docs.oracle.com/javase/7/docs/api/java/util/Collection.html?is-external=true) instances.

[CommandVisitor](http://docs.google.com/org/apache/commons/collections4/sequence/CommandVisitor.html)<[T](http://docs.google.com/org/apache/commons/collections4/sequence/CommandVisitor.html)> - Interface in [org.apache.commons.collections4.sequence](http://docs.google.com/org/apache/commons/collections4/sequence/package-summary.html)

This interface should be implemented by user object to walk through [EditScript](http://docs.google.com/org/apache/commons/collections4/sequence/EditScript.html) objects.

[ComparableComparator](http://docs.google.com/org/apache/commons/collections4/comparators/ComparableComparator.html)<[E](http://docs.google.com/org/apache/commons/collections4/comparators/ComparableComparator.html) extends [Comparable](https://docs.oracle.com/javase/7/docs/api/java/lang/Comparable.html?is-external=true)<? super [E](http://docs.google.com/org/apache/commons/collections4/comparators/ComparableComparator.html)>> - Class in [org.apache.commons.collections4.comparators](http://docs.google.com/org/apache/commons/collections4/comparators/package-summary.html)

A [Comparator](https://docs.oracle.com/javase/7/docs/api/java/util/Comparator.html?is-external=true) that compares [Comparable](https://docs.oracle.com/javase/7/docs/api/java/lang/Comparable.html?is-external=true) objects.

[ComparableComparator()](http://docs.google.com/org/apache/commons/collections4/comparators/ComparableComparator.html#ComparableComparator--) - Constructor for class org.apache.commons.collections4.comparators.[ComparableComparator](http://docs.google.com/org/apache/commons/collections4/comparators/ComparableComparator.html)

Constructor whose use should be avoided.

[comparableComparator()](http://docs.google.com/org/apache/commons/collections4/comparators/ComparableComparator.html#comparableComparator--) - Static method in class org.apache.commons.collections4.comparators.[ComparableComparator](http://docs.google.com/org/apache/commons/collections4/comparators/ComparableComparator.html)

Gets the singleton instance of a ComparableComparator.

[comparator()](http://docs.google.com/org/apache/commons/collections4/bag/AbstractSortedBagDecorator.html#comparator--) - Method in class org.apache.commons.collections4.bag.[AbstractSortedBagDecorator](http://docs.google.com/org/apache/commons/collections4/bag/AbstractSortedBagDecorator.html)   [comparator()](http://docs.google.com/org/apache/commons/collections4/bag/PredicatedSortedBag.html#comparator--) - Method in class org.apache.commons.collections4.bag.[PredicatedSortedBag](http://docs.google.com/org/apache/commons/collections4/bag/PredicatedSortedBag.html)   [comparator()](http://docs.google.com/org/apache/commons/collections4/bag/SynchronizedSortedBag.html#comparator--) - Method in class org.apache.commons.collections4.bag.[SynchronizedSortedBag](http://docs.google.com/org/apache/commons/collections4/bag/SynchronizedSortedBag.html)   [comparator()](http://docs.google.com/org/apache/commons/collections4/bag/TransformedSortedBag.html#comparator--) - Method in class org.apache.commons.collections4.bag.[TransformedSortedBag](http://docs.google.com/org/apache/commons/collections4/bag/TransformedSortedBag.html)   [comparator()](http://docs.google.com/org/apache/commons/collections4/bag/TreeBag.html#comparator--) - Method in class org.apache.commons.collections4.bag.[TreeBag](http://docs.google.com/org/apache/commons/collections4/bag/TreeBag.html)   [comparator()](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractSortedBidiMapDecorator.html#comparator--) - Method in class org.apache.commons.collections4.bidimap.[AbstractSortedBidiMapDecorator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractSortedBidiMapDecorator.html)   [comparator()](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.html#comparator--) - Method in class org.apache.commons.collections4.bidimap.[DualTreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.html)   [comparator()](http://docs.google.com/org/apache/commons/collections4/map/AbstractSortedMapDecorator.html#comparator--) - Method in class org.apache.commons.collections4.map.[AbstractSortedMapDecorator](http://docs.google.com/org/apache/commons/collections4/map/AbstractSortedMapDecorator.html)   [comparator()](http://docs.google.com/org/apache/commons/collections4/map/LazySortedMap.html#comparator--) - Method in class org.apache.commons.collections4.map.[LazySortedMap](http://docs.google.com/org/apache/commons/collections4/map/LazySortedMap.html)   [comparator()](http://docs.google.com/org/apache/commons/collections4/map/PredicatedSortedMap.html#comparator--) - Method in class org.apache.commons.collections4.map.[PredicatedSortedMap](http://docs.google.com/org/apache/commons/collections4/map/PredicatedSortedMap.html)   [comparator()](http://docs.google.com/org/apache/commons/collections4/map/TransformedSortedMap.html#comparator--) - Method in class org.apache.commons.collections4.map.[TransformedSortedMap](http://docs.google.com/org/apache/commons/collections4/map/TransformedSortedMap.html)   [comparator()](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableSortedMap.html#comparator--) - Method in class org.apache.commons.collections4.map.[UnmodifiableSortedMap](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableSortedMap.html)   [comparator()](http://docs.google.com/org/apache/commons/collections4/set/AbstractSortedSetDecorator.html#comparator--) - Method in class org.apache.commons.collections4.set.[AbstractSortedSetDecorator](http://docs.google.com/org/apache/commons/collections4/set/AbstractSortedSetDecorator.html)   [comparator()](http://docs.google.com/org/apache/commons/collections4/set/PredicatedSortedSet.html#comparator--) - Method in class org.apache.commons.collections4.set.[PredicatedSortedSet](http://docs.google.com/org/apache/commons/collections4/set/PredicatedSortedSet.html)   [comparator()](http://docs.google.com/org/apache/commons/collections4/set/TransformedSortedSet.html#comparator--) - Method in class org.apache.commons.collections4.set.[TransformedSortedSet](http://docs.google.com/org/apache/commons/collections4/set/TransformedSortedSet.html)   [comparator()](http://docs.google.com/org/apache/commons/collections4/SortedBag.html#comparator--) - Method in interface org.apache.commons.collections4.[SortedBag](http://docs.google.com/org/apache/commons/collections4/SortedBag.html)

Returns the comparator associated with this sorted set, or null if it uses its elements' natural ordering.

[comparator()](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html#comparator--) - Method in class org.apache.commons.collections4.trie.[UnmodifiableTrie](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html)   [ComparatorChain](http://docs.google.com/org/apache/commons/collections4/comparators/ComparatorChain.html)<[E](http://docs.google.com/org/apache/commons/collections4/comparators/ComparatorChain.html)> - Class in [org.apache.commons.collections4.comparators](http://docs.google.com/org/apache/commons/collections4/comparators/package-summary.html)

A ComparatorChain is a Comparator that wraps one or more Comparators in sequence.

[ComparatorChain()](http://docs.google.com/org/apache/commons/collections4/comparators/ComparatorChain.html#ComparatorChain--) - Constructor for class org.apache.commons.collections4.comparators.[ComparatorChain](http://docs.google.com/org/apache/commons/collections4/comparators/ComparatorChain.html)

Construct a ComparatorChain with no Comparators.

[ComparatorChain(Comparator<E>)](http://docs.google.com/org/apache/commons/collections4/comparators/ComparatorChain.html#ComparatorChain-java.util.Comparator-) - Constructor for class org.apache.commons.collections4.comparators.[ComparatorChain](http://docs.google.com/org/apache/commons/collections4/comparators/ComparatorChain.html)

Construct a ComparatorChain with a single Comparator, sorting in the forward order

[ComparatorChain(Comparator<E>, boolean)](http://docs.google.com/org/apache/commons/collections4/comparators/ComparatorChain.html#ComparatorChain-java.util.Comparator-boolean-) - Constructor for class org.apache.commons.collections4.comparators.[ComparatorChain](http://docs.google.com/org/apache/commons/collections4/comparators/ComparatorChain.html)

Construct a Comparator chain with a single Comparator, sorting in the given order

[ComparatorChain(List<Comparator<E>>)](http://docs.google.com/org/apache/commons/collections4/comparators/ComparatorChain.html#ComparatorChain-java.util.List-) - Constructor for class org.apache.commons.collections4.comparators.[ComparatorChain](http://docs.google.com/org/apache/commons/collections4/comparators/ComparatorChain.html)

Construct a ComparatorChain from the Comparators in the List.

[ComparatorChain(List<Comparator<E>>, BitSet)](http://docs.google.com/org/apache/commons/collections4/comparators/ComparatorChain.html#ComparatorChain-java.util.List-java.util.BitSet-) - Constructor for class org.apache.commons.collections4.comparators.[ComparatorChain](http://docs.google.com/org/apache/commons/collections4/comparators/ComparatorChain.html)

Construct a ComparatorChain from the Comparators in the given List.

[ComparatorPredicate](http://docs.google.com/org/apache/commons/collections4/functors/ComparatorPredicate.html)<[T](http://docs.google.com/org/apache/commons/collections4/functors/ComparatorPredicate.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Predicate that compares the input object with the one stored in the predicate using a comparator.

[ComparatorPredicate(T, Comparator<T>, ComparatorPredicate.Criterion)](http://docs.google.com/org/apache/commons/collections4/functors/ComparatorPredicate.html#ComparatorPredicate-T-java.util.Comparator-org.apache.commons.collections4.functors.ComparatorPredicate.Criterion-) - Constructor for class org.apache.commons.collections4.functors.[ComparatorPredicate](http://docs.google.com/org/apache/commons/collections4/functors/ComparatorPredicate.html)

Constructor that performs no validation.

[comparatorPredicate(T, Comparator<T>)](http://docs.google.com/org/apache/commons/collections4/functors/ComparatorPredicate.html#comparatorPredicate-T-java.util.Comparator-) - Static method in class org.apache.commons.collections4.functors.[ComparatorPredicate](http://docs.google.com/org/apache/commons/collections4/functors/ComparatorPredicate.html)

Factory to create the comparator predicate

[comparatorPredicate(T, Comparator<T>, ComparatorPredicate.Criterion)](http://docs.google.com/org/apache/commons/collections4/functors/ComparatorPredicate.html#comparatorPredicate-T-java.util.Comparator-org.apache.commons.collections4.functors.ComparatorPredicate.Criterion-) - Static method in class org.apache.commons.collections4.functors.[ComparatorPredicate](http://docs.google.com/org/apache/commons/collections4/functors/ComparatorPredicate.html)

Factory to create the comparator predicate

[ComparatorPredicate.Criterion](http://docs.google.com/org/apache/commons/collections4/functors/ComparatorPredicate.Criterion.html) - Enum in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)   [ComparatorUtils](http://docs.google.com/org/apache/commons/collections4/ComparatorUtils.html) - Class in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

Provides convenient static utility methods for Comparator objects.

[compare(Boolean, Boolean)](http://docs.google.com/org/apache/commons/collections4/comparators/BooleanComparator.html#compare-java.lang.Boolean-java.lang.Boolean-) - Method in class org.apache.commons.collections4.comparators.[BooleanComparator](http://docs.google.com/org/apache/commons/collections4/comparators/BooleanComparator.html)

Compares two non-null Boolean objects according to the value of [BooleanComparator.sortsTrueFirst()](http://docs.google.com/org/apache/commons/collections4/comparators/BooleanComparator.html#sortsTrueFirst--).

[compare(E, E)](http://docs.google.com/org/apache/commons/collections4/comparators/ComparableComparator.html#compare-E-E-) - Method in class org.apache.commons.collections4.comparators.[ComparableComparator](http://docs.google.com/org/apache/commons/collections4/comparators/ComparableComparator.html)

Compare the two [Comparable](https://docs.oracle.com/javase/7/docs/api/java/lang/Comparable.html?is-external=true) arguments.

[compare(E, E)](http://docs.google.com/org/apache/commons/collections4/comparators/ComparatorChain.html#compare-E-E-) - Method in class org.apache.commons.collections4.comparators.[ComparatorChain](http://docs.google.com/org/apache/commons/collections4/comparators/ComparatorChain.html)

Perform comparisons on the Objects as per Comparator.compare(o1,o2).

[compare(T, T)](http://docs.google.com/org/apache/commons/collections4/comparators/FixedOrderComparator.html#compare-T-T-) - Method in class org.apache.commons.collections4.comparators.[FixedOrderComparator](http://docs.google.com/org/apache/commons/collections4/comparators/FixedOrderComparator.html)

Compares two objects according to the order of this Comparator.

[compare(E, E)](http://docs.google.com/org/apache/commons/collections4/comparators/NullComparator.html#compare-E-E-) - Method in class org.apache.commons.collections4.comparators.[NullComparator](http://docs.google.com/org/apache/commons/collections4/comparators/NullComparator.html)

Perform a comparison between two objects.

[compare(E, E)](http://docs.google.com/org/apache/commons/collections4/comparators/ReverseComparator.html#compare-E-E-) - Method in class org.apache.commons.collections4.comparators.[ReverseComparator](http://docs.google.com/org/apache/commons/collections4/comparators/ReverseComparator.html)

Compares two objects in reverse order.

[compare(I, I)](http://docs.google.com/org/apache/commons/collections4/comparators/TransformingComparator.html#compare-I-I-) - Method in class org.apache.commons.collections4.comparators.[TransformingComparator](http://docs.google.com/org/apache/commons/collections4/comparators/TransformingComparator.html)

Returns the result of comparing the values from the transform operation.

[compare(K, K)](http://docs.google.com/org/apache/commons/collections4/trie/KeyAnalyzer.html#compare-K-K-) - Method in class org.apache.commons.collections4.trie.[KeyAnalyzer](http://docs.google.com/org/apache/commons/collections4/trie/KeyAnalyzer.html)   [CompositeCollection](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html)<[E](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html)> - Class in [org.apache.commons.collections4.collection](http://docs.google.com/org/apache/commons/collections4/collection/package-summary.html)

Decorates a collection of other collections to provide a single unified view.

[CompositeCollection()](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html#CompositeCollection--) - Constructor for class org.apache.commons.collections4.collection.[CompositeCollection](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html)

Create an empty CompositeCollection.

[CompositeCollection(Collection<E>)](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html#CompositeCollection-java.util.Collection-) - Constructor for class org.apache.commons.collections4.collection.[CompositeCollection](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html)

Create a Composite Collection with one collection.

[CompositeCollection(Collection<E>, Collection<E>)](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html#CompositeCollection-java.util.Collection-java.util.Collection-) - Constructor for class org.apache.commons.collections4.collection.[CompositeCollection](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html)

Create a Composite Collection with two collections.

[CompositeCollection(Collection<E>...)](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html#CompositeCollection-java.util.Collection...-) - Constructor for class org.apache.commons.collections4.collection.[CompositeCollection](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html)

Create a Composite Collection with an array of collections.

[CompositeCollection.CollectionMutator](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.CollectionMutator.html)<[E](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.CollectionMutator.html)> - Interface in [org.apache.commons.collections4.collection](http://docs.google.com/org/apache/commons/collections4/collection/package-summary.html)

Pluggable strategy to handle changes to the composite.

[CompositeMap](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html),[V](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

Decorates a map of other maps to provide a single unified view.

[CompositeMap()](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html#CompositeMap--) - Constructor for class org.apache.commons.collections4.map.[CompositeMap](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html)

Create a new, empty, CompositeMap.

[CompositeMap(Map<K, V>, Map<K, V>)](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html#CompositeMap-java.util.Map-java.util.Map-) - Constructor for class org.apache.commons.collections4.map.[CompositeMap](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html)

Create a new CompositeMap with two composited Map instances.

[CompositeMap(Map<K, V>, Map<K, V>, CompositeMap.MapMutator<K, V>)](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html#CompositeMap-java.util.Map-java.util.Map-org.apache.commons.collections4.map.CompositeMap.MapMutator-) - Constructor for class org.apache.commons.collections4.map.[CompositeMap](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html)

Create a new CompositeMap with two composited Map instances.

[CompositeMap(Map<K, V>...)](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html#CompositeMap-java.util.Map...-) - Constructor for class org.apache.commons.collections4.map.[CompositeMap](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html)

Create a new CompositeMap which composites all of the Map instances in the argument.

[CompositeMap(Map<K, V>[], CompositeMap.MapMutator<K, V>)](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html#CompositeMap-java.util.Map:A-org.apache.commons.collections4.map.CompositeMap.MapMutator-) - Constructor for class org.apache.commons.collections4.map.[CompositeMap](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html)

Create a new CompositeMap which composites all of the Map instances in the argument.

[CompositeMap.MapMutator](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.MapMutator.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.MapMutator.html),[V](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.MapMutator.html)> - Interface in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

This interface allows definition for all of the indeterminate mutators in a CompositeMap, as well as providing a hook for callbacks on key collisions.

[CompositeSet](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html)<[E](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html)> - Class in [org.apache.commons.collections4.set](http://docs.google.com/org/apache/commons/collections4/set/package-summary.html)

Decorates a set of other sets to provide a single unified view.

[CompositeSet()](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html#CompositeSet--) - Constructor for class org.apache.commons.collections4.set.[CompositeSet](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html)

Create an empty CompositeSet.

[CompositeSet(Set<E>)](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html#CompositeSet-java.util.Set-) - Constructor for class org.apache.commons.collections4.set.[CompositeSet](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html)

Create a CompositeSet with just set composited.

[CompositeSet(Set<E>...)](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html#CompositeSet-java.util.Set...-) - Constructor for class org.apache.commons.collections4.set.[CompositeSet](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html)

Create a composite set with sets as the initial set of composited Sets.

[CompositeSet.SetMutator](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.SetMutator.html)<[E](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.SetMutator.html)> - Interface in [org.apache.commons.collections4.set](http://docs.google.com/org/apache/commons/collections4/set/package-summary.html)

Define callbacks for mutation operations.

[constantFactory(T)](http://docs.google.com/org/apache/commons/collections4/FactoryUtils.html#constantFactory-T-) - Static method in class org.apache.commons.collections4.[FactoryUtils](http://docs.google.com/org/apache/commons/collections4/FactoryUtils.html)

Creates a Factory that will return the same object each time the factory is used.

[ConstantFactory](http://docs.google.com/org/apache/commons/collections4/functors/ConstantFactory.html)<[T](http://docs.google.com/org/apache/commons/collections4/functors/ConstantFactory.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Factory implementation that returns the same constant each time.

[ConstantFactory(T)](http://docs.google.com/org/apache/commons/collections4/functors/ConstantFactory.html#ConstantFactory-T-) - Constructor for class org.apache.commons.collections4.functors.[ConstantFactory](http://docs.google.com/org/apache/commons/collections4/functors/ConstantFactory.html)

Constructor that performs no validation.

[constantFactory(T)](http://docs.google.com/org/apache/commons/collections4/functors/ConstantFactory.html#constantFactory-T-) - Static method in class org.apache.commons.collections4.functors.[ConstantFactory](http://docs.google.com/org/apache/commons/collections4/functors/ConstantFactory.html)

Factory method that performs validation.

[ConstantTimeToLiveExpirationPolicy()](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.ConstantTimeToLiveExpirationPolicy.html#ConstantTimeToLiveExpirationPolicy--) - Constructor for class org.apache.commons.collections4.map.[PassiveExpiringMap.ConstantTimeToLiveExpirationPolicy](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.ConstantTimeToLiveExpirationPolicy.html)

Default constructor.

[ConstantTimeToLiveExpirationPolicy(long)](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.ConstantTimeToLiveExpirationPolicy.html#ConstantTimeToLiveExpirationPolicy-long-) - Constructor for class org.apache.commons.collections4.map.[PassiveExpiringMap.ConstantTimeToLiveExpirationPolicy](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.ConstantTimeToLiveExpirationPolicy.html)

Construct a policy with the given time-to-live constant measured in milliseconds.

[ConstantTimeToLiveExpirationPolicy(long, TimeUnit)](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.ConstantTimeToLiveExpirationPolicy.html#ConstantTimeToLiveExpirationPolicy-long-java.util.concurrent.TimeUnit-) - Constructor for class org.apache.commons.collections4.map.[PassiveExpiringMap.ConstantTimeToLiveExpirationPolicy](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.ConstantTimeToLiveExpirationPolicy.html)

Construct a policy with the given time-to-live constant measured in the given time unit of measure.

[ConstantTransformer](http://docs.google.com/org/apache/commons/collections4/functors/ConstantTransformer.html)<[I](http://docs.google.com/org/apache/commons/collections4/functors/ConstantTransformer.html),[O](http://docs.google.com/org/apache/commons/collections4/functors/ConstantTransformer.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Transformer implementation that returns the same constant each time.

[ConstantTransformer(O)](http://docs.google.com/org/apache/commons/collections4/functors/ConstantTransformer.html#ConstantTransformer-O-) - Constructor for class org.apache.commons.collections4.functors.[ConstantTransformer](http://docs.google.com/org/apache/commons/collections4/functors/ConstantTransformer.html)

Constructor that performs no validation.

[constantTransformer(O)](http://docs.google.com/org/apache/commons/collections4/functors/ConstantTransformer.html#constantTransformer-O-) - Static method in class org.apache.commons.collections4.functors.[ConstantTransformer](http://docs.google.com/org/apache/commons/collections4/functors/ConstantTransformer.html)

Transformer method that performs validation.

[constantTransformer(O)](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html#constantTransformer-O-) - Static method in class org.apache.commons.collections4.[TransformerUtils](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html)

Creates a Transformer that will return the same object each time the transformer is used.

[contains(Object)](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html#contains-java.lang.Object-) - Method in class org.apache.commons.collections4.bag.[AbstractMapBag](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html)

Determines if the bag contains the given element by checking if the underlying map contains the element as a key.

[contains(Object)](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.KeySet.html#contains-java.lang.Object-) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.KeySet](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.KeySet.html)   [contains(Object)](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.Values.html#contains-java.lang.Object-) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.Values](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.Values.html)   [contains(Object)](http://docs.google.com/org/apache/commons/collections4/collection/AbstractCollectionDecorator.html#contains-java.lang.Object-) - Method in class org.apache.commons.collections4.collection.[AbstractCollectionDecorator](http://docs.google.com/org/apache/commons/collections4/collection/AbstractCollectionDecorator.html)   [contains(Object)](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html#contains-java.lang.Object-) - Method in class org.apache.commons.collections4.collection.[CompositeCollection](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html)

Checks whether this composite collection contains the object.

[contains(Object)](http://docs.google.com/org/apache/commons/collections4/collection/IndexedCollection.html#contains-java.lang.Object-) - Method in class org.apache.commons.collections4.collection.[IndexedCollection](http://docs.google.com/org/apache/commons/collections4/collection/IndexedCollection.html) [contains(Object)](http://docs.google.com/org/apache/commons/collections4/collection/SynchronizedCollection.html#contains-java.lang.Object-) - Method in class org.apache.commons.collections4.collection.[SynchronizedCollection](http://docs.google.com/org/apache/commons/collections4/collection/SynchronizedCollection.html)   [contains(Object)](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html#contains-java.lang.Object-) - Method in class org.apache.commons.collections4.[FluentIterable](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html)

Checks if the object is contained in this iterable.

[contains(Iterable<E>, Object)](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#contains-java.lang.Iterable-java.lang.Object-) - Static method in class org.apache.commons.collections4.[IterableUtils](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html)

Checks if the object is contained in the given iterable.

[contains(Iterable<? extends E>, E, Equator<? super E>)](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#contains-java.lang.Iterable-E-org.apache.commons.collections4.Equator-) - Static method in class org.apache.commons.collections4.[IterableUtils](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html)

Checks if the object is contained in the given iterable.

[contains(Iterator<E>, Object)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#contains-java.util.Iterator-java.lang.Object-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Checks if the object is contained in the given iterator.

[contains(Object)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#contains-java.lang.Object-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)   [contains(Object)](http://docs.google.com/org/apache/commons/collections4/list/SetUniqueList.html#contains-java.lang.Object-) - Method in class org.apache.commons.collections4.list.[SetUniqueList](http://docs.google.com/org/apache/commons/collections4/list/SetUniqueList.html)   [contains(Object)](http://docs.google.com/org/apache/commons/collections4/list/TreeList.html#contains-java.lang.Object-) - Method in class org.apache.commons.collections4.list.[TreeList](http://docs.google.com/org/apache/commons/collections4/list/TreeList.html)

Searches for the presence of an object in the list.

[contains(Object)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.EntrySet.html#contains-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap.EntrySet](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.EntrySet.html)   [contains(Object)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySet.html#contains-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap.KeySet](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySet.html)   [contains(Object)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.Values.html#contains-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap.Values](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.Values.html)   [contains(Object)](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.html#contains-java.lang.Object-) - Method in class org.apache.commons.collections4.multiset.[AbstractMapMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.html)

Determines if the multiset contains the given element by checking if the underlying map contains the element as a key.

[contains(Object)](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html#contains-java.lang.Object-) - Method in class org.apache.commons.collections4.multiset.[AbstractMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html)

Determines if the multiset contains the given element.

[contains(Object)](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.EntrySet.html#contains-java.lang.Object-) - Method in class org.apache.commons.collections4.multiset.[AbstractMultiSet.EntrySet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.EntrySet.html)   [contains(Object)](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.UniqueSet.html#contains-java.lang.Object-) - Method in class org.apache.commons.collections4.multiset.[AbstractMultiSet.UniqueSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.UniqueSet.html)   [contains(Object)](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html#contains-java.lang.Object-) - Method in class org.apache.commons.collections4.set.[CompositeSet](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html)

Checks whether this composite set contains the object.

[contains(Object)](http://docs.google.com/org/apache/commons/collections4/set/MapBackedSet.html#contains-java.lang.Object-) - Method in class org.apache.commons.collections4.set.[MapBackedSet](http://docs.google.com/org/apache/commons/collections4/set/MapBackedSet.html)   [containsAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html#containsAll-java.util.Collection-) - Method in class org.apache.commons.collections4.bag.[AbstractMapBag](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html)

Determines if the bag contains the given elements.

[containsAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/bag/CollectionBag.html#containsAll-java.util.Collection-) - Method in class org.apache.commons.collections4.bag.[CollectionBag](http://docs.google.com/org/apache/commons/collections4/bag/CollectionBag.html)

*(Change)* Returns true if the bag contains all elements in the given collection, **not** respecting cardinality.

[containsAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/bag/CollectionSortedBag.html#containsAll-java.util.Collection-) - Method in class org.apache.commons.collections4.bag.[CollectionSortedBag](http://docs.google.com/org/apache/commons/collections4/bag/CollectionSortedBag.html)   [containsAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/Bag.html#containsAll-java.util.Collection-) - Method in interface org.apache.commons.collections4.[Bag](http://docs.google.com/org/apache/commons/collections4/Bag.html)

*(Violation)* Returns true if the bag contains all elements in the given collection, respecting cardinality.

[containsAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/collection/AbstractCollectionDecorator.html#containsAll-java.util.Collection-) - Method in class org.apache.commons.collections4.collection.[AbstractCollectionDecorator](http://docs.google.com/org/apache/commons/collections4/collection/AbstractCollectionDecorator.html)   [containsAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html#containsAll-java.util.Collection-) - Method in class org.apache.commons.collections4.collection.[CompositeCollection](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html)

Checks whether this composite contains all the elements in the specified collection.

[containsAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/collection/IndexedCollection.html#containsAll-java.util.Collection-) - Method in class org.apache.commons.collections4.collection.[IndexedCollection](http://docs.google.com/org/apache/commons/collections4/collection/IndexedCollection.html) [containsAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/collection/SynchronizedCollection.html#containsAll-java.util.Collection-) - Method in class org.apache.commons.collections4.collection.[SynchronizedCollection](http://docs.google.com/org/apache/commons/collections4/collection/SynchronizedCollection.html)   [containsAll(Collection<?>, Collection<?>)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#containsAll-java.util.Collection-java.util.Collection-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Returns true iff all elements of coll2 are also contained in coll1.

[containsAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#containsAll-java.util.Collection-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)   [containsAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/list/SetUniqueList.html#containsAll-java.util.Collection-) - Method in class org.apache.commons.collections4.list.[SetUniqueList](http://docs.google.com/org/apache/commons/collections4/list/SetUniqueList.html)   [containsAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.UniqueSet.html#containsAll-java.util.Collection-) - Method in class org.apache.commons.collections4.multiset.[AbstractMultiSet.UniqueSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.UniqueSet.html)   [containsAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/MultiSet.html#containsAll-java.util.Collection-) - Method in interface org.apache.commons.collections4.[MultiSet](http://docs.google.com/org/apache/commons/collections4/MultiSet.html)

Returns true if the MultiSet contains at least one occurrence for each element contained in the given collection.

[containsAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html#containsAll-java.util.Collection-) - Method in class org.apache.commons.collections4.set.[CompositeSet](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html)

Checks whether this composite contains all the elements in the specified collection.

[containsAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/set/MapBackedSet.html#containsAll-java.util.Collection-) - Method in class org.apache.commons.collections4.set.[MapBackedSet](http://docs.google.com/org/apache/commons/collections4/set/MapBackedSet.html)   [containsAny(Collection<?>, T...)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#containsAny-java.util.Collection-T...-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Returns true iff at least one element is in both collections.

[containsAny(Collection<?>, Collection<?>)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#containsAny-java.util.Collection-java.util.Collection-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Returns true iff at least one element is in both collections.

[containsKey(Object)](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html#containsKey-java.lang.Object-) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html)   [containsKey(Object)](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html#containsKey-java.lang.Object-) - Method in class org.apache.commons.collections4.bidimap.[TreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html)

Checks whether this map contains the a mapping for the specified key.

[containsKey(Object)](http://docs.google.com/org/apache/commons/collections4/Get.html#containsKey-java.lang.Object-) - Method in interface org.apache.commons.collections4.[Get](http://docs.google.com/org/apache/commons/collections4/Get.html)   [containsKey(Object)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#containsKey-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Checks whether the map contains the specified key.

[containsKey(Object)](http://docs.google.com/org/apache/commons/collections4/map/AbstractMapDecorator.html#containsKey-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[AbstractMapDecorator](http://docs.google.com/org/apache/commons/collections4/map/AbstractMapDecorator.html)   [containsKey(Object)](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html#containsKey-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[AbstractReferenceMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html)

Checks whether the map contains the specified key.

[containsKey(Object)](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html#containsKey-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[CompositeMap](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html)

Returns true if this map contains a mapping for the specified key.

[containsKey(Object)](http://docs.google.com/org/apache/commons/collections4/map/Flat3Map.html#containsKey-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[Flat3Map](http://docs.google.com/org/apache/commons/collections4/map/Flat3Map.html)

Checks whether the map contains the specified key.

[containsKey(Object, Object)](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html#containsKey-java.lang.Object-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[MultiKeyMap](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html)

Checks whether the map contains the specified multi-key.

[containsKey(Object, Object, Object)](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html#containsKey-java.lang.Object-java.lang.Object-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[MultiKeyMap](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html)

Checks whether the map contains the specified multi-key.

[containsKey(Object, Object, Object, Object)](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html#containsKey-java.lang.Object-java.lang.Object-java.lang.Object-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[MultiKeyMap](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html)

Checks whether the map contains the specified multi-key.

[containsKey(Object, Object, Object, Object, Object)](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html#containsKey-java.lang.Object-java.lang.Object-java.lang.Object-java.lang.Object-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[MultiKeyMap](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html)

Checks whether the map contains the specified multi-key.

[containsKey(Object)](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.html#containsKey-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[PassiveExpiringMap](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.html)

All expired entries are removed from the map prior to determining the contains result.

[containsKey(Object)](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html#containsKey-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[SingletonMap](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html)

Checks whether the map contains the specified key.

[containsKey(Object)](http://docs.google.com/org/apache/commons/collections4/map/StaticBucketMap.html#containsKey-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[StaticBucketMap](http://docs.google.com/org/apache/commons/collections4/map/StaticBucketMap.html)

Checks if the map contains the specified key.

[containsKey(Object)](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html#containsKey-java.lang.Object-) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html)   [containsKey(Object)](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html#containsKey-java.lang.Object-) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMapDecorator](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html)   [containsKey(Object)](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html#containsKey-java.lang.Object-) - Method in interface org.apache.commons.collections4.[MultiValuedMap](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html)

Returns true if this map contains a mapping for the specified key.

[containsKey(Object)](http://docs.google.com/org/apache/commons/collections4/splitmap/AbstractIterableGetMapDecorator.html#containsKey-java.lang.Object-) - Method in class org.apache.commons.collections4.splitmap.[AbstractIterableGetMapDecorator](http://docs.google.com/org/apache/commons/collections4/splitmap/AbstractIterableGetMapDecorator.html)   [containsKey(Object)](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html#containsKey-java.lang.Object-) - Method in class org.apache.commons.collections4.trie.[UnmodifiableTrie](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html)   [containsMapping(Object, Object)](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html#containsMapping-java.lang.Object-java.lang.Object-) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html)   [containsMapping(Object, Object)](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html#containsMapping-java.lang.Object-java.lang.Object-) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMapDecorator](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html)   [containsMapping(Object, Object)](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html#containsMapping-java.lang.Object-java.lang.Object-) - Method in interface org.apache.commons.collections4.[MultiValuedMap](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html)

Checks whether the map contains a mapping for the specified key and value.

[containsValue(Object)](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html#containsValue-java.lang.Object-) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html)   [containsValue(Object)](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.ViewMap.html#containsValue-java.lang.Object-) - Method in class org.apache.commons.collections4.bidimap.[DualTreeBidiMap.ViewMap](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.ViewMap.html)   [containsValue(Object)](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html#containsValue-java.lang.Object-) - Method in class org.apache.commons.collections4.bidimap.[TreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html)

Checks whether this map contains the a mapping for the specified value.

[containsValue(Object)](http://docs.google.com/org/apache/commons/collections4/Get.html#containsValue-java.lang.Object-) - Method in interface org.apache.commons.collections4.[Get](http://docs.google.com/org/apache/commons/collections4/Get.html)   [containsValue(Object)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#containsValue-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Checks whether the map contains the specified value.

[containsValue(Object)](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html#containsValue-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[AbstractLinkedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html)

Checks whether the map contains the specified value.

[containsValue(Object)](http://docs.google.com/org/apache/commons/collections4/map/AbstractMapDecorator.html#containsValue-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[AbstractMapDecorator](http://docs.google.com/org/apache/commons/collections4/map/AbstractMapDecorator.html)   [containsValue(Object)](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html#containsValue-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[AbstractReferenceMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html)

Checks whether the map contains the specified value.

[containsValue(Object)](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html#containsValue-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[CompositeMap](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html)

Returns true if this map maps one or more keys to the specified value.

[containsValue(Object)](http://docs.google.com/org/apache/commons/collections4/map/Flat3Map.html#containsValue-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[Flat3Map](http://docs.google.com/org/apache/commons/collections4/map/Flat3Map.html)

Checks whether the map contains the specified value.

[containsValue(Object)](http://docs.google.com/org/apache/commons/collections4/map/MultiValueMap.html#containsValue-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[MultiValueMap](http://docs.google.com/org/apache/commons/collections4/map/MultiValueMap.html)

Deprecated.

Checks whether the map contains the value specified.

[containsValue(Object, Object)](http://docs.google.com/org/apache/commons/collections4/map/MultiValueMap.html#containsValue-java.lang.Object-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[MultiValueMap](http://docs.google.com/org/apache/commons/collections4/map/MultiValueMap.html)

Deprecated.

Checks whether the collection at the specified key contains the value.

[containsValue(Object)](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.html#containsValue-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[PassiveExpiringMap](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.html)

All expired entries are removed from the map prior to determining the contains result.

[containsValue(Object)](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html#containsValue-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[SingletonMap](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html)

Checks whether the map contains the specified value.

[containsValue(Object)](http://docs.google.com/org/apache/commons/collections4/map/StaticBucketMap.html#containsValue-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[StaticBucketMap](http://docs.google.com/org/apache/commons/collections4/map/StaticBucketMap.html)

Checks if the map contains the specified value.

[containsValue(Object)](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html#containsValue-java.lang.Object-) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html)   [containsValue(Object)](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html#containsValue-java.lang.Object-) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMapDecorator](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html)   [containsValue(Object)](http://docs.google.com/org/apache/commons/collections4/MultiMap.html#containsValue-java.lang.Object-) - Method in interface org.apache.commons.collections4.[MultiMap](http://docs.google.com/org/apache/commons/collections4/MultiMap.html)

Deprecated.

Checks whether the map contains the value specified.

[containsValue(Object)](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html#containsValue-java.lang.Object-) - Method in interface org.apache.commons.collections4.[MultiValuedMap](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html)

Checks whether the map contains at least one mapping for the specified value.

[containsValue(Object)](http://docs.google.com/org/apache/commons/collections4/splitmap/AbstractIterableGetMapDecorator.html#containsValue-java.lang.Object-) - Method in class org.apache.commons.collections4.splitmap.[AbstractIterableGetMapDecorator](http://docs.google.com/org/apache/commons/collections4/splitmap/AbstractIterableGetMapDecorator.html)   [containsValue(Object)](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html#containsValue-java.lang.Object-) - Method in class org.apache.commons.collections4.trie.[UnmodifiableTrie](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html)   [convertKey(Object)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#convertKey-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Converts input keys to another object for storage in the map.

[convertKey(Object)](http://docs.google.com/org/apache/commons/collections4/map/CaseInsensitiveMap.html#convertKey-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[CaseInsensitiveMap](http://docs.google.com/org/apache/commons/collections4/map/CaseInsensitiveMap.html)

Overrides convertKey() from [AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html) to convert keys to lower case.

[copyInto(Collection<? super E>)](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html#copyInto-java.util.Collection-) - Method in class org.apache.commons.collections4.[FluentIterable](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html)

Traverses an iterator of this iterable and adds all elements to the provided collection.

[copyInto(S)](http://docs.google.com/org/apache/commons/collections4/SetUtils.SetView.html#copyInto-S-) - Method in class org.apache.commons.collections4.[SetUtils.SetView](http://docs.google.com/org/apache/commons/collections4/SetUtils.SetView.html)

Copies the contents of this view into the provided set.

[countMatches(Iterable<C>, Predicate<? super C>)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#countMatches-java.lang.Iterable-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Deprecated.

since 4.1, use [IterableUtils.countMatches(Iterable, Predicate)](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#countMatches-java.lang.Iterable-org.apache.commons.collections4.Predicate-) instead

[countMatches(Iterable<E>, Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#countMatches-java.lang.Iterable-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[IterableUtils](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html)

Counts the number of elements in the input iterable that match the predicate.

[create()](http://docs.google.com/org/apache/commons/collections4/Factory.html#create--) - Method in interface org.apache.commons.collections4.[Factory](http://docs.google.com/org/apache/commons/collections4/Factory.html)

Create a new object.

[create()](http://docs.google.com/org/apache/commons/collections4/functors/ConstantFactory.html#create--) - Method in class org.apache.commons.collections4.functors.[ConstantFactory](http://docs.google.com/org/apache/commons/collections4/functors/ConstantFactory.html)

Always return constant.

[create()](http://docs.google.com/org/apache/commons/collections4/functors/ExceptionFactory.html#create--) - Method in class org.apache.commons.collections4.functors.[ExceptionFactory](http://docs.google.com/org/apache/commons/collections4/functors/ExceptionFactory.html)

Always throws an exception.

[create()](http://docs.google.com/org/apache/commons/collections4/functors/InstantiateFactory.html#create--) - Method in class org.apache.commons.collections4.functors.[InstantiateFactory](http://docs.google.com/org/apache/commons/collections4/functors/InstantiateFactory.html)

Creates an object using the stored constructor.

[createBidiMap(Map<V, K>, Map<K, V>, BidiMap<K, V>)](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html#createBidiMap-java.util.Map-java.util.Map-org.apache.commons.collections4.BidiMap-) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html)

Creates a new instance of the subclass.

[createBidiMap(Map<V, K>, Map<K, V>, BidiMap<K, V>)](http://docs.google.com/org/apache/commons/collections4/bidimap/DualHashBidiMap.html#createBidiMap-java.util.Map-java.util.Map-org.apache.commons.collections4.BidiMap-) - Method in class org.apache.commons.collections4.bidimap.[DualHashBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/DualHashBidiMap.html)

Creates a new instance of this object.

[createBidiMap(Map<V, K>, Map<K, V>, BidiMap<K, V>)](http://docs.google.com/org/apache/commons/collections4/bidimap/DualLinkedHashBidiMap.html#createBidiMap-java.util.Map-java.util.Map-org.apache.commons.collections4.BidiMap-) - Method in class org.apache.commons.collections4.bidimap.[DualLinkedHashBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/DualLinkedHashBidiMap.html)

Creates a new instance of this object.

[createBidiMap(Map<V, K>, Map<K, V>, BidiMap<K, V>)](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.html#createBidiMap-java.util.Map-java.util.Map-org.apache.commons.collections4.BidiMap-) - Method in class org.apache.commons.collections4.bidimap.[DualTreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.html)

Creates a new instance of this object.

[createCollection(int)](http://docs.google.com/org/apache/commons/collections4/map/MultiValueMap.html#createCollection-int-) - Method in class org.apache.commons.collections4.map.[MultiValueMap](http://docs.google.com/org/apache/commons/collections4/map/MultiValueMap.html)

Deprecated.

Creates a new instance of the map value Collection container using the factory.

[createCollection()](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractListValuedMap.html#createCollection--) - Method in class org.apache.commons.collections4.multimap.[AbstractListValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractListValuedMap.html)

Creates a new value collection using the provided factory.

[createCollection()](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html#createCollection--) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html)   [createCollection()](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractSetValuedMap.html#createCollection--) - Method in class org.apache.commons.collections4.multimap.[AbstractSetValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractSetValuedMap.html)

Creates a new value collection using the provided factory.

[createCollection()](http://docs.google.com/org/apache/commons/collections4/multimap/ArrayListValuedHashMap.html#createCollection--) - Method in class org.apache.commons.collections4.multimap.[ArrayListValuedHashMap](http://docs.google.com/org/apache/commons/collections4/multimap/ArrayListValuedHashMap.html)   [createCollection()](http://docs.google.com/org/apache/commons/collections4/multimap/HashSetValuedHashMap.html#createCollection--) - Method in class org.apache.commons.collections4.multimap.[HashSetValuedHashMap](http://docs.google.com/org/apache/commons/collections4/multimap/HashSetValuedHashMap.html)   [createDelegateMap()](http://docs.google.com/org/apache/commons/collections4/map/Flat3Map.html#createDelegateMap--) - Method in class org.apache.commons.collections4.map.[Flat3Map](http://docs.google.com/org/apache/commons/collections4/map/Flat3Map.html)

Create an instance of the map used for storage when in delegation mode.

[createEntry(AbstractHashedMap.HashEntry<K, V>, int, K, V)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#createEntry-org.apache.commons.collections4.map.AbstractHashedMap.HashEntry-int-K-V-) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Creates an entry to store the key-value data.

[createEntry(AbstractHashedMap.HashEntry<K, V>, int, K, V)](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html#createEntry-org.apache.commons.collections4.map.AbstractHashedMap.HashEntry-int-K-V-) - Method in class org.apache.commons.collections4.map.[AbstractLinkedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html)

Creates an entry to store the data.

[createEntry(AbstractHashedMap.HashEntry<K, V>, int, K, V)](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html#createEntry-org.apache.commons.collections4.map.AbstractHashedMap.HashEntry-int-K-V-) - Method in class org.apache.commons.collections4.map.[AbstractReferenceMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html)

Creates a ReferenceEntry instead of a HashEntry.

[createEntrySet()](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html#createEntrySet--) - Method in class org.apache.commons.collections4.multiset.[AbstractMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html)

Create a new view for the set of entries in this multiset.

[createEntrySetIterator(Iterator<Map.Entry<K, V>>)](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html#createEntrySetIterator-java.util.Iterator-) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html)

Creates an entry set iterator.

[createEntrySetIterator()](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#createEntrySetIterator--) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Creates an entry set iterator.

[createEntrySetIterator()](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html#createEntrySetIterator--) - Method in class org.apache.commons.collections4.map.[AbstractLinkedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html)

Creates an entry set iterator.

[createEntrySetIterator()](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html#createEntrySetIterator--) - Method in class org.apache.commons.collections4.map.[AbstractReferenceMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html)

Creates an entry set iterator.

[createEntrySetIterator()](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.html#createEntrySetIterator--) - Method in class org.apache.commons.collections4.multiset.[AbstractMapMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.html)   [createEntrySetIterator()](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html#createEntrySetIterator--) - Method in class org.apache.commons.collections4.multiset.[AbstractMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html)

Creates an entry set iterator.

[createHeaderNode()](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#createHeaderNode--) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)

Creates a new node with previous, next and element all set to null.

[createIterator()](http://docs.google.com/org/apache/commons/collections4/SetUtils.SetView.html#createIterator--) - Method in class org.apache.commons.collections4.[SetUtils.SetView](http://docs.google.com/org/apache/commons/collections4/SetUtils.SetView.html)

Return an iterator for this view; the returned iterator is not required to be unmodifiable.

[createKeySetIterator(Iterator<K>)](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html#createKeySetIterator-java.util.Iterator-) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html)

Creates a key set iterator.

[createKeySetIterator()](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#createKeySetIterator--) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Creates a key set iterator.

[createKeySetIterator()](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html#createKeySetIterator--) - Method in class org.apache.commons.collections4.map.[AbstractLinkedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html)

Creates a key set iterator.

[createKeySetIterator()](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html#createKeySetIterator--) - Method in class org.apache.commons.collections4.map.[AbstractReferenceMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html)

Creates an key set iterator.

[createNode(E)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#createNode-E-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)

Creates a new node with the specified properties.

[createNode(E)](http://docs.google.com/org/apache/commons/collections4/list/NodeCachingLinkedList.html#createNode-E-) - Method in class org.apache.commons.collections4.list.[NodeCachingLinkedList](http://docs.google.com/org/apache/commons/collections4/list/NodeCachingLinkedList.html)

Creates a new node, either by reusing one from the cache or creating a new one.

[createPredicatedBag()](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.Builder.html#createPredicatedBag--) - Method in class org.apache.commons.collections4.collection.[PredicatedCollection.Builder](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.Builder.html)

Create a new predicated bag filled with the accepted elements.

[createPredicatedBag(Bag<E>)](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.Builder.html#createPredicatedBag-org.apache.commons.collections4.Bag-) - Method in class org.apache.commons.collections4.collection.[PredicatedCollection.Builder](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.Builder.html)

Decorates the given bag with validating behavior using the predicate.

[createPredicatedList()](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.Builder.html#createPredicatedList--) - Method in class org.apache.commons.collections4.collection.[PredicatedCollection.Builder](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.Builder.html)

Create a new predicated list filled with the accepted elements.

[createPredicatedList(List<E>)](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.Builder.html#createPredicatedList-java.util.List-) - Method in class org.apache.commons.collections4.collection.[PredicatedCollection.Builder](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.Builder.html)

Decorates the given list with validating behavior using the predicate.

[createPredicatedMultiSet()](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.Builder.html#createPredicatedMultiSet--) - Method in class org.apache.commons.collections4.collection.[PredicatedCollection.Builder](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.Builder.html)

Create a new predicated multiset filled with the accepted elements.

[createPredicatedMultiSet(MultiSet<E>)](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.Builder.html#createPredicatedMultiSet-org.apache.commons.collections4.MultiSet-) - Method in class org.apache.commons.collections4.collection.[PredicatedCollection.Builder](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.Builder.html)

Decorates the given multiset with validating behavior using the predicate.

[createPredicatedQueue()](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.Builder.html#createPredicatedQueue--) - Method in class org.apache.commons.collections4.collection.[PredicatedCollection.Builder](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.Builder.html)

Create a new predicated queue filled with the accepted elements.

[createPredicatedQueue(Queue<E>)](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.Builder.html#createPredicatedQueue-java.util.Queue-) - Method in class org.apache.commons.collections4.collection.[PredicatedCollection.Builder](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.Builder.html)

Decorates the given queue with validating behavior using the predicate.

[createPredicatedSet()](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.Builder.html#createPredicatedSet--) - Method in class org.apache.commons.collections4.collection.[PredicatedCollection.Builder](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.Builder.html)

Create a new predicated set filled with the accepted elements.

[createPredicatedSet(Set<E>)](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.Builder.html#createPredicatedSet-java.util.Set-) - Method in class org.apache.commons.collections4.collection.[PredicatedCollection.Builder](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.Builder.html)

Decorates the given list with validating behavior using the predicate.

[createProperties()](http://docs.google.com/org/apache/commons/collections4/properties/AbstractPropertiesFactory.html#createProperties--) - Method in class org.apache.commons.collections4.properties.[AbstractPropertiesFactory](http://docs.google.com/org/apache/commons/collections4/properties/AbstractPropertiesFactory.html)

Subclasses override to provide customized properties instances.

[createProperties()](http://docs.google.com/org/apache/commons/collections4/properties/PropertiesFactory.html#createProperties--) - Method in class org.apache.commons.collections4.properties.[PropertiesFactory](http://docs.google.com/org/apache/commons/collections4/properties/PropertiesFactory.html)

Subclasses override to provide customized properties instances.

[createProperties()](http://docs.google.com/org/apache/commons/collections4/properties/SortedPropertiesFactory.html#createProperties--) - Method in class org.apache.commons.collections4.properties.[SortedPropertiesFactory](http://docs.google.com/org/apache/commons/collections4/properties/SortedPropertiesFactory.html)

Subclasses override to provide customized properties instances.

[createSetBasedOnList(Set<E>, List<E>)](http://docs.google.com/org/apache/commons/collections4/list/SetUniqueList.html#createSetBasedOnList-java.util.Set-java.util.List-) - Method in class org.apache.commons.collections4.list.[SetUniqueList](http://docs.google.com/org/apache/commons/collections4/list/SetUniqueList.html)

Create a new [Set](https://docs.oracle.com/javase/7/docs/api/java/util/Set.html?is-external=true) with the same type as the provided set and populate it with all elements of list.

[createSubListIterator(AbstractLinkedList.LinkedSubList<E>)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#createSubListIterator-org.apache.commons.collections4.list.AbstractLinkedList.LinkedSubList-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)

Creates an iterator for the sublist.

[createSubListListIterator(AbstractLinkedList.LinkedSubList<E>, int)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#createSubListListIterator-org.apache.commons.collections4.list.AbstractLinkedList.LinkedSubList-int-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)

Creates a list iterator for the sublist.

[createSubListListIterator(AbstractLinkedList.LinkedSubList<E>, int)](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.html#createSubListListIterator-org.apache.commons.collections4.list.AbstractLinkedList.LinkedSubList-int-) - Method in class org.apache.commons.collections4.list.[CursorableLinkedList](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.html)

Creates a list iterator for the sublist.

[createUniqueSet()](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html#createUniqueSet--) - Method in class org.apache.commons.collections4.multiset.[AbstractMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html)

Create a new view for the set of unique elements in this multiset.

[createUniqueSetIterator()](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.html#createUniqueSetIterator--) - Method in class org.apache.commons.collections4.multiset.[AbstractMapMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.html)   [createUniqueSetIterator()](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html#createUniqueSetIterator--) - Method in class org.apache.commons.collections4.multiset.[AbstractMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html)

Creates a unique set iterator.

[createValuesIterator(Iterator<V>)](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html#createValuesIterator-java.util.Iterator-) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html)

Creates a values iterator.

[createValuesIterator()](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#createValuesIterator--) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Creates a values iterator.

[createValuesIterator()](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html#createValuesIterator--) - Method in class org.apache.commons.collections4.map.[AbstractLinkedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html)

Creates a values iterator.

[createValuesIterator()](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html#createValuesIterator--) - Method in class org.apache.commons.collections4.map.[AbstractReferenceMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html)

Creates an values iterator.

[current](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedListIterator.html#current) - Variable in class org.apache.commons.collections4.list.[AbstractLinkedList.LinkedListIterator](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedListIterator.html)

The last node that was returned by [AbstractLinkedList.LinkedListIterator.next()](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedListIterator.html#next--) or [AbstractLinkedList.LinkedListIterator.previous()](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedListIterator.html#previous--).

[current()](http://docs.google.com/org/apache/commons/collections4/map/EntrySetToMapIteratorAdapter.html#current--) - Method in class org.apache.commons.collections4.map.[EntrySetToMapIteratorAdapter](http://docs.google.com/org/apache/commons/collections4/map/EntrySetToMapIteratorAdapter.html)

Get the currently active entry.

[currentEntry()](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashIterator.html#currentEntry--) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap.HashIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashIterator.html)   [currentEntry()](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkIterator.html#currentEntry--) - Method in class org.apache.commons.collections4.map.[AbstractLinkedMap.LinkIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkIterator.html)   [cursor()](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.html#cursor--) - Method in class org.apache.commons.collections4.list.[CursorableLinkedList](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.html)

Returns a [CursorableLinkedList.Cursor](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.Cursor.html) for iterating through the elements of this list.

[cursor(int)](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.html#cursor-int-) - Method in class org.apache.commons.collections4.list.[CursorableLinkedList](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.html)

Returns a [CursorableLinkedList.Cursor](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.Cursor.html) for iterating through the elements of this list starting from a specified index.

[Cursor(CursorableLinkedList<E>, int)](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.Cursor.html#Cursor-org.apache.commons.collections4.list.CursorableLinkedList-int-) - Constructor for class org.apache.commons.collections4.list.[CursorableLinkedList.Cursor](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.Cursor.html)

Constructs a new cursor.

[CursorableLinkedList](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.html)<[E](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.html)> - Class in [org.apache.commons.collections4.list](http://docs.google.com/org/apache/commons/collections4/list/package-summary.html)

A List implementation with a ListIterator that allows concurrent modifications to the underlying list.

[CursorableLinkedList()](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.html#CursorableLinkedList--) - Constructor for class org.apache.commons.collections4.list.[CursorableLinkedList](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.html)

Constructor that creates.

[CursorableLinkedList(Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.html#CursorableLinkedList-java.util.Collection-) - Constructor for class org.apache.commons.collections4.list.[CursorableLinkedList](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.html)

Constructor that copies the specified collection

[CursorableLinkedList.Cursor](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.Cursor.html)<[E](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.Cursor.html)> - Class in [org.apache.commons.collections4.list](http://docs.google.com/org/apache/commons/collections4/list/package-summary.html)

An extended ListIterator that allows concurrent changes to the underlying list.

[CursorableLinkedList.SubCursor](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.SubCursor.html)<[E](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.SubCursor.html)> - Class in [org.apache.commons.collections4.list](http://docs.google.com/org/apache/commons/collections4/list/package-summary.html)

A cursor for the sublist based on LinkedSubListIterator.

## D

[debugPrint(PrintStream, Object, Map<?, ?>)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#debugPrint-java.io.PrintStream-java.lang.Object-java.util.Map-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Prints the given map with nice line breaks.

[decorated()](http://docs.google.com/org/apache/commons/collections4/bag/AbstractBagDecorator.html#decorated--) - Method in class org.apache.commons.collections4.bag.[AbstractBagDecorator](http://docs.google.com/org/apache/commons/collections4/bag/AbstractBagDecorator.html)

Gets the bag being decorated.

[decorated()](http://docs.google.com/org/apache/commons/collections4/bag/AbstractSortedBagDecorator.html#decorated--) - Method in class org.apache.commons.collections4.bag.[AbstractSortedBagDecorator](http://docs.google.com/org/apache/commons/collections4/bag/AbstractSortedBagDecorator.html)

Gets the bag being decorated.

[decorated()](http://docs.google.com/org/apache/commons/collections4/bag/PredicatedBag.html#decorated--) - Method in class org.apache.commons.collections4.bag.[PredicatedBag](http://docs.google.com/org/apache/commons/collections4/bag/PredicatedBag.html)

Gets the decorated bag.

[decorated()](http://docs.google.com/org/apache/commons/collections4/bag/PredicatedSortedBag.html#decorated--) - Method in class org.apache.commons.collections4.bag.[PredicatedSortedBag](http://docs.google.com/org/apache/commons/collections4/bag/PredicatedSortedBag.html)

Gets the decorated sorted bag.

[decorated()](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractBidiMapDecorator.html#decorated--) - Method in class org.apache.commons.collections4.bidimap.[AbstractBidiMapDecorator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractBidiMapDecorator.html)

Gets the map being decorated.

[decorated()](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractOrderedBidiMapDecorator.html#decorated--) - Method in class org.apache.commons.collections4.bidimap.[AbstractOrderedBidiMapDecorator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractOrderedBidiMapDecorator.html)

Gets the map being decorated.

[decorated()](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractSortedBidiMapDecorator.html#decorated--) - Method in class org.apache.commons.collections4.bidimap.[AbstractSortedBidiMapDecorator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractSortedBidiMapDecorator.html)

Gets the map being decorated.

[decorated()](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.ViewMap.html#decorated--) - Method in class org.apache.commons.collections4.bidimap.[DualTreeBidiMap.ViewMap](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.ViewMap.html)   [decorated()](http://docs.google.com/org/apache/commons/collections4/collection/AbstractCollectionDecorator.html#decorated--) - Method in class org.apache.commons.collections4.collection.[AbstractCollectionDecorator](http://docs.google.com/org/apache/commons/collections4/collection/AbstractCollectionDecorator.html)

Gets the collection being decorated.

[decorated()](http://docs.google.com/org/apache/commons/collections4/collection/SynchronizedCollection.html#decorated--) - Method in class org.apache.commons.collections4.collection.[SynchronizedCollection](http://docs.google.com/org/apache/commons/collections4/collection/SynchronizedCollection.html)

Gets the collection being decorated.

[decorated()](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableBoundedCollection.html#decorated--) - Method in class org.apache.commons.collections4.collection.[UnmodifiableBoundedCollection](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableBoundedCollection.html)   [decorated()](http://docs.google.com/org/apache/commons/collections4/list/AbstractListDecorator.html#decorated--) - Method in class org.apache.commons.collections4.list.[AbstractListDecorator](http://docs.google.com/org/apache/commons/collections4/list/AbstractListDecorator.html)

Gets the list being decorated.

[decorated()](http://docs.google.com/org/apache/commons/collections4/list/PredicatedList.html#decorated--) - Method in class org.apache.commons.collections4.list.[PredicatedList](http://docs.google.com/org/apache/commons/collections4/list/PredicatedList.html)

Gets the list being decorated.

[decorated()](http://docs.google.com/org/apache/commons/collections4/map/AbstractMapDecorator.html#decorated--) - Method in class org.apache.commons.collections4.map.[AbstractMapDecorator](http://docs.google.com/org/apache/commons/collections4/map/AbstractMapDecorator.html)

Gets the map being decorated.

[decorated()](http://docs.google.com/org/apache/commons/collections4/map/AbstractOrderedMapDecorator.html#decorated--) - Method in class org.apache.commons.collections4.map.[AbstractOrderedMapDecorator](http://docs.google.com/org/apache/commons/collections4/map/AbstractOrderedMapDecorator.html)

Gets the map being decorated.

[decorated()](http://docs.google.com/org/apache/commons/collections4/map/AbstractSortedMapDecorator.html#decorated--) - Method in class org.apache.commons.collections4.map.[AbstractSortedMapDecorator](http://docs.google.com/org/apache/commons/collections4/map/AbstractSortedMapDecorator.html)

Gets the map being decorated.

[decorated()](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html#decorated--) - Method in class org.apache.commons.collections4.map.[MultiKeyMap](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html)

Gets the map being decorated.

[decorated()](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html#decorated--) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMapDecorator](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html)

The decorated multi-valued map.

[decorated](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.EntrySetIterator.html#decorated) - Variable in class org.apache.commons.collections4.multiset.[AbstractMapMultiSet.EntrySetIterator](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.EntrySetIterator.html)   [decorated()](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSetDecorator.html#decorated--) - Method in class org.apache.commons.collections4.multiset.[AbstractMultiSetDecorator](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSetDecorator.html)

Gets the multiset being decorated.

[decorated()](http://docs.google.com/org/apache/commons/collections4/multiset/PredicatedMultiSet.html#decorated--) - Method in class org.apache.commons.collections4.multiset.[PredicatedMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/PredicatedMultiSet.html)

Gets the decorated multiset.

[decorated()](http://docs.google.com/org/apache/commons/collections4/multiset/SynchronizedMultiSet.html#decorated--) - Method in class org.apache.commons.collections4.multiset.[SynchronizedMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/SynchronizedMultiSet.html)

Gets the multiset being decorated.

[decorated()](http://docs.google.com/org/apache/commons/collections4/queue/AbstractQueueDecorator.html#decorated--) - Method in class org.apache.commons.collections4.queue.[AbstractQueueDecorator](http://docs.google.com/org/apache/commons/collections4/queue/AbstractQueueDecorator.html)

Gets the queue being decorated.

[decorated()](http://docs.google.com/org/apache/commons/collections4/queue/PredicatedQueue.html#decorated--) - Method in class org.apache.commons.collections4.queue.[PredicatedQueue](http://docs.google.com/org/apache/commons/collections4/queue/PredicatedQueue.html)

Gets the queue being decorated.

[decorated()](http://docs.google.com/org/apache/commons/collections4/queue/SynchronizedQueue.html#decorated--) - Method in class org.apache.commons.collections4.queue.[SynchronizedQueue](http://docs.google.com/org/apache/commons/collections4/queue/SynchronizedQueue.html)

Gets the queue being decorated.

[decorated()](http://docs.google.com/org/apache/commons/collections4/set/AbstractNavigableSetDecorator.html#decorated--) - Method in class org.apache.commons.collections4.set.[AbstractNavigableSetDecorator](http://docs.google.com/org/apache/commons/collections4/set/AbstractNavigableSetDecorator.html)

Gets the set being decorated.

[decorated()](http://docs.google.com/org/apache/commons/collections4/set/AbstractSetDecorator.html#decorated--) - Method in class org.apache.commons.collections4.set.[AbstractSetDecorator](http://docs.google.com/org/apache/commons/collections4/set/AbstractSetDecorator.html)

Gets the set being decorated.

[decorated()](http://docs.google.com/org/apache/commons/collections4/set/AbstractSortedSetDecorator.html#decorated--) - Method in class org.apache.commons.collections4.set.[AbstractSortedSetDecorator](http://docs.google.com/org/apache/commons/collections4/set/AbstractSortedSetDecorator.html)

Gets the set being decorated.

[decorated()](http://docs.google.com/org/apache/commons/collections4/set/PredicatedNavigableSet.html#decorated--) - Method in class org.apache.commons.collections4.set.[PredicatedNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/PredicatedNavigableSet.html)

Gets the navigable set being decorated.

[decorated()](http://docs.google.com/org/apache/commons/collections4/set/PredicatedSet.html#decorated--) - Method in class org.apache.commons.collections4.set.[PredicatedSet](http://docs.google.com/org/apache/commons/collections4/set/PredicatedSet.html)

Gets the set being decorated.

[decorated()](http://docs.google.com/org/apache/commons/collections4/set/PredicatedSortedSet.html#decorated--) - Method in class org.apache.commons.collections4.set.[PredicatedSortedSet](http://docs.google.com/org/apache/commons/collections4/set/PredicatedSortedSet.html)

Gets the sorted set being decorated.

[decorated()](http://docs.google.com/org/apache/commons/collections4/set/TransformedNavigableSet.html#decorated--) - Method in class org.apache.commons.collections4.set.[TransformedNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/TransformedNavigableSet.html)

Gets the decorated navigable set.

[decorated()](http://docs.google.com/org/apache/commons/collections4/splitmap/AbstractIterableGetMapDecorator.html#decorated--) - Method in class org.apache.commons.collections4.splitmap.[AbstractIterableGetMapDecorator](http://docs.google.com/org/apache/commons/collections4/splitmap/AbstractIterableGetMapDecorator.html)

Gets the map being decorated.

[DEFAULT\_CAPACITY](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#DEFAULT_CAPACITY) - Static variable in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

The default capacity to use

[DEFAULT\_LOAD\_FACTOR](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#DEFAULT_LOAD_FACTOR) - Static variable in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

The default load factor to use

[DEFAULT\_MAX\_SIZE](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html#DEFAULT_MAX_SIZE) - Static variable in class org.apache.commons.collections4.map.[LRUMap](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html)

Default maximum size

[DEFAULT\_THRESHOLD](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#DEFAULT_THRESHOLD) - Static variable in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

The default threshold to use

[DefaultedMap](http://docs.google.com/org/apache/commons/collections4/map/DefaultedMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/DefaultedMap.html),[V](http://docs.google.com/org/apache/commons/collections4/map/DefaultedMap.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

Decorates another Map returning a default value if the map does not contain the requested key.

[DefaultedMap(V)](http://docs.google.com/org/apache/commons/collections4/map/DefaultedMap.html#DefaultedMap-V-) - Constructor for class org.apache.commons.collections4.map.[DefaultedMap](http://docs.google.com/org/apache/commons/collections4/map/DefaultedMap.html)

Constructs a new empty DefaultedMap that decorates a HashMap.

[DefaultedMap(Transformer<? super K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/DefaultedMap.html#DefaultedMap-org.apache.commons.collections4.Transformer-) - Constructor for class org.apache.commons.collections4.map.[DefaultedMap](http://docs.google.com/org/apache/commons/collections4/map/DefaultedMap.html)

Constructs a new empty DefaultedMap that decorates a HashMap.

[DefaultedMap(Map<K, V>, Transformer<? super K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/DefaultedMap.html#DefaultedMap-java.util.Map-org.apache.commons.collections4.Transformer-) - Constructor for class org.apache.commons.collections4.map.[DefaultedMap](http://docs.google.com/org/apache/commons/collections4/map/DefaultedMap.html)

Constructor that wraps (not copies).

[defaultedMap(Map<K, V>, V)](http://docs.google.com/org/apache/commons/collections4/map/DefaultedMap.html#defaultedMap-java.util.Map-V-) - Static method in class org.apache.commons.collections4.map.[DefaultedMap](http://docs.google.com/org/apache/commons/collections4/map/DefaultedMap.html)

Factory method to create a defaulting map.

[defaultedMap(Map<K, V>, Factory<? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/DefaultedMap.html#defaultedMap-java.util.Map-org.apache.commons.collections4.Factory-) - Static method in class org.apache.commons.collections4.map.[DefaultedMap](http://docs.google.com/org/apache/commons/collections4/map/DefaultedMap.html)

Factory method to create a defaulting map.

[defaultedMap(Map<K, V>, Transformer<? super K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/DefaultedMap.html#defaultedMap-java.util.Map-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.map.[DefaultedMap](http://docs.google.com/org/apache/commons/collections4/map/DefaultedMap.html)

Factory method to create a defaulting map.

[DefaultEquator](http://docs.google.com/org/apache/commons/collections4/functors/DefaultEquator.html)<[T](http://docs.google.com/org/apache/commons/collections4/functors/DefaultEquator.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Default [Equator](http://docs.google.com/org/apache/commons/collections4/Equator.html) implementation.

[defaultEquator()](http://docs.google.com/org/apache/commons/collections4/functors/DefaultEquator.html#defaultEquator--) - Static method in class org.apache.commons.collections4.functors.[DefaultEquator](http://docs.google.com/org/apache/commons/collections4/functors/DefaultEquator.html)

Factory returning the typed singleton instance.

[defaultIfNull(List<T>, List<T>)](http://docs.google.com/org/apache/commons/collections4/ListUtils.html#defaultIfNull-java.util.List-java.util.List-) - Static method in class org.apache.commons.collections4.[ListUtils](http://docs.google.com/org/apache/commons/collections4/ListUtils.html)

Returns either the passed in list, or if the list is null, the value of defaultList.

[DefaultKeyValue](http://docs.google.com/org/apache/commons/collections4/keyvalue/DefaultKeyValue.html)<[K](http://docs.google.com/org/apache/commons/collections4/keyvalue/DefaultKeyValue.html),[V](http://docs.google.com/org/apache/commons/collections4/keyvalue/DefaultKeyValue.html)> - Class in [org.apache.commons.collections4.keyvalue](http://docs.google.com/org/apache/commons/collections4/keyvalue/package-summary.html)

A mutable KeyValue pair that does not implement [Map.Entry](https://docs.oracle.com/javase/7/docs/api/java/util/Map.Entry.html?is-external=true).

[DefaultKeyValue()](http://docs.google.com/org/apache/commons/collections4/keyvalue/DefaultKeyValue.html#DefaultKeyValue--) - Constructor for class org.apache.commons.collections4.keyvalue.[DefaultKeyValue](http://docs.google.com/org/apache/commons/collections4/keyvalue/DefaultKeyValue.html)

Constructs a new pair with a null key and null value.

[DefaultKeyValue(K, V)](http://docs.google.com/org/apache/commons/collections4/keyvalue/DefaultKeyValue.html#DefaultKeyValue-K-V-) - Constructor for class org.apache.commons.collections4.keyvalue.[DefaultKeyValue](http://docs.google.com/org/apache/commons/collections4/keyvalue/DefaultKeyValue.html)

Constructs a new pair with the specified key and given value.

[DefaultKeyValue(KeyValue<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/keyvalue/DefaultKeyValue.html#DefaultKeyValue-org.apache.commons.collections4.KeyValue-) - Constructor for class org.apache.commons.collections4.keyvalue.[DefaultKeyValue](http://docs.google.com/org/apache/commons/collections4/keyvalue/DefaultKeyValue.html)

Constructs a new pair from the specified KeyValue.

[DefaultKeyValue(Map.Entry<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/keyvalue/DefaultKeyValue.html#DefaultKeyValue-java.util.Map.Entry-) - Constructor for class org.apache.commons.collections4.keyvalue.[DefaultKeyValue](http://docs.google.com/org/apache/commons/collections4/keyvalue/DefaultKeyValue.html)

Constructs a new pair from the specified Map.Entry.

[DefaultMapEntry](http://docs.google.com/org/apache/commons/collections4/keyvalue/DefaultMapEntry.html)<[K](http://docs.google.com/org/apache/commons/collections4/keyvalue/DefaultMapEntry.html),[V](http://docs.google.com/org/apache/commons/collections4/keyvalue/DefaultMapEntry.html)> - Class in [org.apache.commons.collections4.keyvalue](http://docs.google.com/org/apache/commons/collections4/keyvalue/package-summary.html)

A restricted implementation of [Map.Entry](https://docs.oracle.com/javase/7/docs/api/java/util/Map.Entry.html?is-external=true) that prevents the [Map.Entry](https://docs.oracle.com/javase/7/docs/api/java/util/Map.Entry.html?is-external=true) contract from being broken.

[DefaultMapEntry(K, V)](http://docs.google.com/org/apache/commons/collections4/keyvalue/DefaultMapEntry.html#DefaultMapEntry-K-V-) - Constructor for class org.apache.commons.collections4.keyvalue.[DefaultMapEntry](http://docs.google.com/org/apache/commons/collections4/keyvalue/DefaultMapEntry.html)

Constructs a new entry with the specified key and given value.

[DefaultMapEntry(KeyValue<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/keyvalue/DefaultMapEntry.html#DefaultMapEntry-org.apache.commons.collections4.KeyValue-) - Constructor for class org.apache.commons.collections4.keyvalue.[DefaultMapEntry](http://docs.google.com/org/apache/commons/collections4/keyvalue/DefaultMapEntry.html)

Constructs a new entry from the specified KeyValue.

[DefaultMapEntry(Map.Entry<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/keyvalue/DefaultMapEntry.html#DefaultMapEntry-java.util.Map.Entry-) - Constructor for class org.apache.commons.collections4.keyvalue.[DefaultMapEntry](http://docs.google.com/org/apache/commons/collections4/keyvalue/DefaultMapEntry.html)

Constructs a new entry from the specified Map.Entry.

[DeleteCommand](http://docs.google.com/org/apache/commons/collections4/sequence/DeleteCommand.html)<[T](http://docs.google.com/org/apache/commons/collections4/sequence/DeleteCommand.html)> - Class in [org.apache.commons.collections4.sequence](http://docs.google.com/org/apache/commons/collections4/sequence/package-summary.html)

Command representing the deletion of one object of the first sequence.

[DeleteCommand(T)](http://docs.google.com/org/apache/commons/collections4/sequence/DeleteCommand.html#DeleteCommand-T-) - Constructor for class org.apache.commons.collections4.sequence.[DeleteCommand](http://docs.google.com/org/apache/commons/collections4/sequence/DeleteCommand.html)

Simple constructor.

[descendingIterator()](http://docs.google.com/org/apache/commons/collections4/set/AbstractNavigableSetDecorator.html#descendingIterator--) - Method in class org.apache.commons.collections4.set.[AbstractNavigableSetDecorator](http://docs.google.com/org/apache/commons/collections4/set/AbstractNavigableSetDecorator.html)   [descendingIterator()](http://docs.google.com/org/apache/commons/collections4/set/PredicatedNavigableSet.html#descendingIterator--) - Method in class org.apache.commons.collections4.set.[PredicatedNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/PredicatedNavigableSet.html)   [descendingIterator()](http://docs.google.com/org/apache/commons/collections4/set/TransformedNavigableSet.html#descendingIterator--) - Method in class org.apache.commons.collections4.set.[TransformedNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/TransformedNavigableSet.html)   [descendingIterator()](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableNavigableSet.html#descendingIterator--) - Method in class org.apache.commons.collections4.set.[UnmodifiableNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableNavigableSet.html)   [descendingSet()](http://docs.google.com/org/apache/commons/collections4/set/AbstractNavigableSetDecorator.html#descendingSet--) - Method in class org.apache.commons.collections4.set.[AbstractNavigableSetDecorator](http://docs.google.com/org/apache/commons/collections4/set/AbstractNavigableSetDecorator.html)   [descendingSet()](http://docs.google.com/org/apache/commons/collections4/set/PredicatedNavigableSet.html#descendingSet--) - Method in class org.apache.commons.collections4.set.[PredicatedNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/PredicatedNavigableSet.html)   [descendingSet()](http://docs.google.com/org/apache/commons/collections4/set/TransformedNavigableSet.html#descendingSet--) - Method in class org.apache.commons.collections4.set.[TransformedNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/TransformedNavigableSet.html)   [descendingSet()](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableNavigableSet.html#descendingSet--) - Method in class org.apache.commons.collections4.set.[UnmodifiableNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableNavigableSet.html)   [destroyEntry(AbstractHashedMap.HashEntry<K, V>)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#destroyEntry-org.apache.commons.collections4.map.AbstractHashedMap.HashEntry-) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Kills an entry ready for the garbage collector.

[difference(Set<? extends E>, Set<? extends E>)](http://docs.google.com/org/apache/commons/collections4/SetUtils.html#difference-java.util.Set-java.util.Set-) - Static method in class org.apache.commons.collections4.[SetUtils](http://docs.google.com/org/apache/commons/collections4/SetUtils.html)

Returns a unmodifiable **view** containing the difference of the given [Set](https://docs.oracle.com/javase/7/docs/api/java/util/Set.html?is-external=true)s, denoted by a \ b (or a - b).

[disjunction(Iterable<? extends O>, Iterable<? extends O>)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#disjunction-java.lang.Iterable-java.lang.Iterable-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Returns a [Collection](https://docs.oracle.com/javase/7/docs/api/java/util/Collection.html?is-external=true) containing the exclusive disjunction (symmetric difference) of the given [Iterable](https://docs.oracle.com/javase/7/docs/api/java/lang/Iterable.html?is-external=true)s.

[disjunction(Set<? extends E>, Set<? extends E>)](http://docs.google.com/org/apache/commons/collections4/SetUtils.html#disjunction-java.util.Set-java.util.Set-) - Static method in class org.apache.commons.collections4.[SetUtils](http://docs.google.com/org/apache/commons/collections4/SetUtils.html)

Returns a unmodifiable **view** of the symmetric difference of the given [Set](https://docs.oracle.com/javase/7/docs/api/java/util/Set.html?is-external=true)s.

[doReadObject(Map<E, AbstractMapBag.MutableInteger>, ObjectInputStream)](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html#doReadObject-java.util.Map-java.io.ObjectInputStream-) - Method in class org.apache.commons.collections4.bag.[AbstractMapBag](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html)

Read the map in using a custom routine.

[doReadObject(ObjectInputStream)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#doReadObject-java.io.ObjectInputStream-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)

Deserializes the data held in this object to the stream specified.

[doReadObject(ObjectInputStream)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#doReadObject-java.io.ObjectInputStream-) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Reads the map data from the stream.

[doReadObject(ObjectInputStream)](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html#doReadObject-java.io.ObjectInputStream-) - Method in class org.apache.commons.collections4.map.[AbstractReferenceMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html)

Replaces the superclass method to read the state of this class.

[doReadObject(ObjectInputStream)](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html#doReadObject-java.io.ObjectInputStream-) - Method in class org.apache.commons.collections4.map.[LRUMap](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html)

Reads the data necessary for put() to work in the superclass.

[doReadObject(ObjectInputStream)](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html#doReadObject-java.io.ObjectInputStream-) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html)

Read the map in using a custom routine.

[doReadObject(ObjectInputStream)](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.html#doReadObject-java.io.ObjectInputStream-) - Method in class org.apache.commons.collections4.multiset.[AbstractMapMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.html)

Read the multiset in using a custom routine.

[doReadObject(ObjectInputStream)](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html#doReadObject-java.io.ObjectInputStream-) - Method in class org.apache.commons.collections4.multiset.[AbstractMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html)

Read the multiset in using a custom routine.

[doWhileClosure(Closure<? super E>, Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/ClosureUtils.html#doWhileClosure-org.apache.commons.collections4.Closure-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[ClosureUtils](http://docs.google.com/org/apache/commons/collections4/ClosureUtils.html)

Creates a Closure that will call the closure once and then repeatedly until the predicate returns false.

[doWriteObject(ObjectOutputStream)](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html#doWriteObject-java.io.ObjectOutputStream-) - Method in class org.apache.commons.collections4.bag.[AbstractMapBag](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html)

Write the map out using a custom routine.

[doWriteObject(ObjectOutputStream)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#doWriteObject-java.io.ObjectOutputStream-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)

Serializes the data held in this object to the stream specified.

[doWriteObject(ObjectOutputStream)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#doWriteObject-java.io.ObjectOutputStream-) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Writes the map data to the stream.

[doWriteObject(ObjectOutputStream)](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html#doWriteObject-java.io.ObjectOutputStream-) - Method in class org.apache.commons.collections4.map.[AbstractReferenceMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html)

Replaces the superclass method to store the state of this class.

[doWriteObject(ObjectOutputStream)](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html#doWriteObject-java.io.ObjectOutputStream-) - Method in class org.apache.commons.collections4.map.[LRUMap](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html)

Writes the data necessary for put() to work in deserialization.

[doWriteObject(ObjectOutputStream)](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html#doWriteObject-java.io.ObjectOutputStream-) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html)

Write the map out using a custom routine.

[doWriteObject(ObjectOutputStream)](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.html#doWriteObject-java.io.ObjectOutputStream-) - Method in class org.apache.commons.collections4.multiset.[AbstractMapMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.html)

Write the multiset out using a custom routine.

[doWriteObject(ObjectOutputStream)](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html#doWriteObject-java.io.ObjectOutputStream-) - Method in class org.apache.commons.collections4.multiset.[AbstractMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html)

Write the multiset out using a custom routine.

[DualHashBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/DualHashBidiMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/bidimap/DualHashBidiMap.html),[V](http://docs.google.com/org/apache/commons/collections4/bidimap/DualHashBidiMap.html)> - Class in [org.apache.commons.collections4.bidimap](http://docs.google.com/org/apache/commons/collections4/bidimap/package-summary.html)

Implementation of [BidiMap](http://docs.google.com/org/apache/commons/collections4/BidiMap.html) that uses two [HashMap](https://docs.oracle.com/javase/7/docs/api/java/util/HashMap.html?is-external=true) instances.

[DualHashBidiMap()](http://docs.google.com/org/apache/commons/collections4/bidimap/DualHashBidiMap.html#DualHashBidiMap--) - Constructor for class org.apache.commons.collections4.bidimap.[DualHashBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/DualHashBidiMap.html)

Creates an empty HashBidiMap.

[DualHashBidiMap(Map<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/bidimap/DualHashBidiMap.html#DualHashBidiMap-java.util.Map-) - Constructor for class org.apache.commons.collections4.bidimap.[DualHashBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/DualHashBidiMap.html)

Constructs a HashBidiMap and copies the mappings from specified Map.

[DualHashBidiMap(Map<K, V>, Map<V, K>, BidiMap<V, K>)](http://docs.google.com/org/apache/commons/collections4/bidimap/DualHashBidiMap.html#DualHashBidiMap-java.util.Map-java.util.Map-org.apache.commons.collections4.BidiMap-) - Constructor for class org.apache.commons.collections4.bidimap.[DualHashBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/DualHashBidiMap.html)

Constructs a HashBidiMap that decorates the specified maps.

[DualLinkedHashBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/DualLinkedHashBidiMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/bidimap/DualLinkedHashBidiMap.html),[V](http://docs.google.com/org/apache/commons/collections4/bidimap/DualLinkedHashBidiMap.html)> - Class in [org.apache.commons.collections4.bidimap](http://docs.google.com/org/apache/commons/collections4/bidimap/package-summary.html)

Implementation of BidiMap that uses two LinkedHashMap instances.

[DualLinkedHashBidiMap()](http://docs.google.com/org/apache/commons/collections4/bidimap/DualLinkedHashBidiMap.html#DualLinkedHashBidiMap--) - Constructor for class org.apache.commons.collections4.bidimap.[DualLinkedHashBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/DualLinkedHashBidiMap.html)

Creates an empty HashBidiMap.

[DualLinkedHashBidiMap(Map<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/bidimap/DualLinkedHashBidiMap.html#DualLinkedHashBidiMap-java.util.Map-) - Constructor for class org.apache.commons.collections4.bidimap.[DualLinkedHashBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/DualLinkedHashBidiMap.html)

Constructs a LinkedHashBidiMap and copies the mappings from specified Map.

[DualLinkedHashBidiMap(Map<K, V>, Map<V, K>, BidiMap<V, K>)](http://docs.google.com/org/apache/commons/collections4/bidimap/DualLinkedHashBidiMap.html#DualLinkedHashBidiMap-java.util.Map-java.util.Map-org.apache.commons.collections4.BidiMap-) - Constructor for class org.apache.commons.collections4.bidimap.[DualLinkedHashBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/DualLinkedHashBidiMap.html)

Constructs a LinkedHashBidiMap that decorates the specified maps.

[DualTreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.html),[V](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.html)> - Class in [org.apache.commons.collections4.bidimap](http://docs.google.com/org/apache/commons/collections4/bidimap/package-summary.html)

Implementation of [BidiMap](http://docs.google.com/org/apache/commons/collections4/BidiMap.html) that uses two [TreeMap](https://docs.oracle.com/javase/7/docs/api/java/util/TreeMap.html?is-external=true) instances.

[DualTreeBidiMap()](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.html#DualTreeBidiMap--) - Constructor for class org.apache.commons.collections4.bidimap.[DualTreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.html)

Creates an empty DualTreeBidiMap

[DualTreeBidiMap(Map<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.html#DualTreeBidiMap-java.util.Map-) - Constructor for class org.apache.commons.collections4.bidimap.[DualTreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.html)

Constructs a DualTreeBidiMap and copies the mappings from specified Map.

[DualTreeBidiMap(Comparator<? super K>, Comparator<? super V>)](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.html#DualTreeBidiMap-java.util.Comparator-java.util.Comparator-) - Constructor for class org.apache.commons.collections4.bidimap.[DualTreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.html)

Constructs a [DualTreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.html) using the specified [Comparator](https://docs.oracle.com/javase/7/docs/api/java/util/Comparator.html?is-external=true).

[DualTreeBidiMap(Map<K, V>, Map<V, K>, BidiMap<V, K>)](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.html#DualTreeBidiMap-java.util.Map-java.util.Map-org.apache.commons.collections4.BidiMap-) - Constructor for class org.apache.commons.collections4.bidimap.[DualTreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.html)

Constructs a [DualTreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.html) that decorates the specified maps.

[DualTreeBidiMap.BidiOrderedMapIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.BidiOrderedMapIterator.html)<[K](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.BidiOrderedMapIterator.html),[V](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.BidiOrderedMapIterator.html)> - Class in [org.apache.commons.collections4.bidimap](http://docs.google.com/org/apache/commons/collections4/bidimap/package-summary.html)

Inner class MapIterator.

[DualTreeBidiMap.ViewMap](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.ViewMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.ViewMap.html),[V](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.ViewMap.html)> - Class in [org.apache.commons.collections4.bidimap](http://docs.google.com/org/apache/commons/collections4/bidimap/package-summary.html)

Internal sorted map view.

## E

[EditCommand](http://docs.google.com/org/apache/commons/collections4/sequence/EditCommand.html)<[T](http://docs.google.com/org/apache/commons/collections4/sequence/EditCommand.html)> - Class in [org.apache.commons.collections4.sequence](http://docs.google.com/org/apache/commons/collections4/sequence/package-summary.html)

Abstract base class for all commands used to transform an objects sequence into another one.

[EditCommand(T)](http://docs.google.com/org/apache/commons/collections4/sequence/EditCommand.html#EditCommand-T-) - Constructor for class org.apache.commons.collections4.sequence.[EditCommand](http://docs.google.com/org/apache/commons/collections4/sequence/EditCommand.html)

Simple constructor.

[EditScript](http://docs.google.com/org/apache/commons/collections4/sequence/EditScript.html)<[T](http://docs.google.com/org/apache/commons/collections4/sequence/EditScript.html)> - Class in [org.apache.commons.collections4.sequence](http://docs.google.com/org/apache/commons/collections4/sequence/package-summary.html)

This class gathers all the [commands](http://docs.google.com/org/apache/commons/collections4/sequence/EditCommand.html) needed to transform one objects sequence into another objects sequence.

[EditScript()](http://docs.google.com/org/apache/commons/collections4/sequence/EditScript.html#EditScript--) - Constructor for class org.apache.commons.collections4.sequence.[EditScript](http://docs.google.com/org/apache/commons/collections4/sequence/EditScript.html)

Simple constructor.

[eitherPredicate(Predicate<? super T>, Predicate<? super T>)](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html#eitherPredicate-org.apache.commons.collections4.Predicate-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[PredicateUtils](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html)

Create a new Predicate that returns true if one, but not both, of the specified predicates are true.

[element()](http://docs.google.com/org/apache/commons/collections4/iterators/PeekingIterator.html#element--) - Method in class org.apache.commons.collections4.iterators.[PeekingIterator](http://docs.google.com/org/apache/commons/collections4/iterators/PeekingIterator.html)

Returns the next element in iteration without advancing the underlying iterator.

[element()](http://docs.google.com/org/apache/commons/collections4/queue/AbstractQueueDecorator.html#element--) - Method in class org.apache.commons.collections4.queue.[AbstractQueueDecorator](http://docs.google.com/org/apache/commons/collections4/queue/AbstractQueueDecorator.html)   [element()](http://docs.google.com/org/apache/commons/collections4/queue/CircularFifoQueue.html#element--) - Method in class org.apache.commons.collections4.queue.[CircularFifoQueue](http://docs.google.com/org/apache/commons/collections4/queue/CircularFifoQueue.html)   [element()](http://docs.google.com/org/apache/commons/collections4/queue/PredicatedQueue.html#element--) - Method in class org.apache.commons.collections4.queue.[PredicatedQueue](http://docs.google.com/org/apache/commons/collections4/queue/PredicatedQueue.html)   [element()](http://docs.google.com/org/apache/commons/collections4/queue/SynchronizedQueue.html#element--) - Method in class org.apache.commons.collections4.queue.[SynchronizedQueue](http://docs.google.com/org/apache/commons/collections4/queue/SynchronizedQueue.html)   [element()](http://docs.google.com/org/apache/commons/collections4/queue/TransformedQueue.html#element--) - Method in class org.apache.commons.collections4.queue.[TransformedQueue](http://docs.google.com/org/apache/commons/collections4/queue/TransformedQueue.html)   [empty()](http://docs.google.com/org/apache/commons/collections4/ArrayStack.html#empty--) - Method in class org.apache.commons.collections4.[ArrayStack](http://docs.google.com/org/apache/commons/collections4/ArrayStack.html)

Deprecated.

Return true if this stack is currently empty.

[empty()](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html#empty--) - Static method in class org.apache.commons.collections4.[FluentIterable](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html)

Creates a new empty FluentIterable.

[EMPTY\_BAG](http://docs.google.com/org/apache/commons/collections4/BagUtils.html#EMPTY_BAG) - Static variable in class org.apache.commons.collections4.[BagUtils](http://docs.google.com/org/apache/commons/collections4/BagUtils.html)

An empty unmodifiable bag.

[EMPTY\_COLLECTION](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#EMPTY_COLLECTION) - Static variable in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

An empty unmodifiable collection.

[EMPTY\_ITERATOR](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#EMPTY_ITERATOR) - Static variable in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

An iterator over no elements.

[EMPTY\_LIST\_ITERATOR](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#EMPTY_LIST_ITERATOR) - Static variable in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

A list iterator over no elements.

[EMPTY\_MAP\_ITERATOR](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#EMPTY_MAP_ITERATOR) - Static variable in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

A map iterator over no elements.

[EMPTY\_MULTI\_VALUED\_MAP](http://docs.google.com/org/apache/commons/collections4/MultiMapUtils.html#EMPTY_MULTI_VALUED_MAP) - Static variable in class org.apache.commons.collections4.[MultiMapUtils](http://docs.google.com/org/apache/commons/collections4/MultiMapUtils.html)

An empty [UnmodifiableMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/UnmodifiableMultiValuedMap.html).

[EMPTY\_MULTISET](http://docs.google.com/org/apache/commons/collections4/MultiSetUtils.html#EMPTY_MULTISET) - Static variable in class org.apache.commons.collections4.[MultiSetUtils](http://docs.google.com/org/apache/commons/collections4/MultiSetUtils.html)

An empty unmodifiable multiset.

[EMPTY\_ORDERED\_ITERATOR](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#EMPTY_ORDERED_ITERATOR) - Static variable in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

An ordered iterator over no elements.

[EMPTY\_ORDERED\_MAP\_ITERATOR](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#EMPTY_ORDERED_MAP_ITERATOR) - Static variable in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

An ordered map iterator over no elements.

[EMPTY\_QUEUE](http://docs.google.com/org/apache/commons/collections4/QueueUtils.html#EMPTY_QUEUE) - Static variable in class org.apache.commons.collections4.[QueueUtils](http://docs.google.com/org/apache/commons/collections4/QueueUtils.html)

An empty unmodifiable queue.

[EMPTY\_SORTED\_BAG](http://docs.google.com/org/apache/commons/collections4/BagUtils.html#EMPTY_SORTED_BAG) - Static variable in class org.apache.commons.collections4.[BagUtils](http://docs.google.com/org/apache/commons/collections4/BagUtils.html)

An empty unmodifiable sorted bag.

[EMPTY\_SORTED\_MAP](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#EMPTY_SORTED_MAP) - Static variable in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

An empty unmodifiable sorted map.

[EMPTY\_SORTED\_SET](http://docs.google.com/org/apache/commons/collections4/SetUtils.html#EMPTY_SORTED_SET) - Static variable in class org.apache.commons.collections4.[SetUtils](http://docs.google.com/org/apache/commons/collections4/SetUtils.html)

An empty unmodifiable sorted set.

[emptyBag()](http://docs.google.com/org/apache/commons/collections4/BagUtils.html#emptyBag--) - Static method in class org.apache.commons.collections4.[BagUtils](http://docs.google.com/org/apache/commons/collections4/BagUtils.html)

Get an empty Bag.

[emptyCollection()](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#emptyCollection--) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Returns the immutable EMPTY\_COLLECTION with generic type safety.

[emptyIfNull(Collection<T>)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#emptyIfNull-java.util.Collection-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Returns an immutable empty collection if the argument is null, or the argument itself otherwise.

[emptyIfNull(Iterable<E>)](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#emptyIfNull-java.lang.Iterable-) - Static method in class org.apache.commons.collections4.[IterableUtils](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html)

Returns an immutable empty iterable if the argument is null, or the argument itself otherwise.

[emptyIfNull(List<T>)](http://docs.google.com/org/apache/commons/collections4/ListUtils.html#emptyIfNull-java.util.List-) - Static method in class org.apache.commons.collections4.[ListUtils](http://docs.google.com/org/apache/commons/collections4/ListUtils.html)

Returns an immutable empty list if the argument is null, or the argument itself otherwise.

[emptyIfNull(Map<K, V>)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#emptyIfNull-java.util.Map-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Returns an immutable empty map if the argument is null, or the argument itself otherwise.

[emptyIfNull(MultiValuedMap<K, V>)](http://docs.google.com/org/apache/commons/collections4/MultiMapUtils.html#emptyIfNull-org.apache.commons.collections4.MultiValuedMap-) - Static method in class org.apache.commons.collections4.[MultiMapUtils](http://docs.google.com/org/apache/commons/collections4/MultiMapUtils.html)

Returns an immutable empty MultiValuedMap if the argument is null, or the argument itself otherwise.

[emptyIfNull(Set<T>)](http://docs.google.com/org/apache/commons/collections4/SetUtils.html#emptyIfNull-java.util.Set-) - Static method in class org.apache.commons.collections4.[SetUtils](http://docs.google.com/org/apache/commons/collections4/SetUtils.html)

Returns an immutable empty set if the argument is null, or the argument itself otherwise.

[emptyIterable()](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#emptyIterable--) - Static method in class org.apache.commons.collections4.[IterableUtils](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html)

Gets an empty iterable.

[EmptyIterator](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyIterator.html)<[E](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyIterator.html)> - Class in [org.apache.commons.collections4.iterators](http://docs.google.com/org/apache/commons/collections4/iterators/package-summary.html)

Provides an implementation of an empty iterator.

[EmptyIterator()](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyIterator.html#EmptyIterator--) - Constructor for class org.apache.commons.collections4.iterators.[EmptyIterator](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyIterator.html)

Constructor.

[emptyIterator()](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyIterator.html#emptyIterator--) - Static method in class org.apache.commons.collections4.iterators.[EmptyIterator](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyIterator.html)

Get a typed empty iterator instance.

[emptyIterator()](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#emptyIterator--) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets an empty iterator.

[EmptyListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyListIterator.html)<[E](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyListIterator.html)> - Class in [org.apache.commons.collections4.iterators](http://docs.google.com/org/apache/commons/collections4/iterators/package-summary.html)

Provides an implementation of an empty list iterator.

[EmptyListIterator()](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyListIterator.html#EmptyListIterator--) - Constructor for class org.apache.commons.collections4.iterators.[EmptyListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyListIterator.html)

Constructor.

[emptyListIterator()](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyListIterator.html#emptyListIterator--) - Static method in class org.apache.commons.collections4.iterators.[EmptyListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyListIterator.html)

Get a typed instance of the iterator.

[emptyListIterator()](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#emptyListIterator--) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets an empty list iterator.

[EmptyMapIterator](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyMapIterator.html)<[K](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyMapIterator.html),[V](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyMapIterator.html)> - Class in [org.apache.commons.collections4.iterators](http://docs.google.com/org/apache/commons/collections4/iterators/package-summary.html)

Provides an implementation of an empty map iterator.

[EmptyMapIterator()](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyMapIterator.html#EmptyMapIterator--) - Constructor for class org.apache.commons.collections4.iterators.[EmptyMapIterator](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyMapIterator.html)

Constructor.

[emptyMapIterator()](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyMapIterator.html#emptyMapIterator--) - Static method in class org.apache.commons.collections4.iterators.[EmptyMapIterator](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyMapIterator.html)

Get a typed instance of the iterator.

[emptyMapIterator()](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#emptyMapIterator--) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets an empty map iterator.

[emptyMultiSet()](http://docs.google.com/org/apache/commons/collections4/MultiSetUtils.html#emptyMultiSet--) - Static method in class org.apache.commons.collections4.[MultiSetUtils](http://docs.google.com/org/apache/commons/collections4/MultiSetUtils.html)

Get an empty MultiSet.

[emptyMultiValuedMap()](http://docs.google.com/org/apache/commons/collections4/MultiMapUtils.html#emptyMultiValuedMap--) - Static method in class org.apache.commons.collections4.[MultiMapUtils](http://docs.google.com/org/apache/commons/collections4/MultiMapUtils.html)

Returns immutable EMPTY\_MULTI\_VALUED\_MAP with generic type safety.

[EmptyOrderedIterator](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyOrderedIterator.html)<[E](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyOrderedIterator.html)> - Class in [org.apache.commons.collections4.iterators](http://docs.google.com/org/apache/commons/collections4/iterators/package-summary.html)

Provides an implementation of an empty ordered iterator.

[EmptyOrderedIterator()](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyOrderedIterator.html#EmptyOrderedIterator--) - Constructor for class org.apache.commons.collections4.iterators.[EmptyOrderedIterator](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyOrderedIterator.html)

Constructor.

[emptyOrderedIterator()](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyOrderedIterator.html#emptyOrderedIterator--) - Static method in class org.apache.commons.collections4.iterators.[EmptyOrderedIterator](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyOrderedIterator.html)

Typed instance of the iterator.

[emptyOrderedIterator()](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#emptyOrderedIterator--) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets an empty ordered iterator.

[EmptyOrderedMapIterator](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyOrderedMapIterator.html)<[K](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyOrderedMapIterator.html),[V](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyOrderedMapIterator.html)> - Class in [org.apache.commons.collections4.iterators](http://docs.google.com/org/apache/commons/collections4/iterators/package-summary.html)

Provides an implementation of an empty ordered map iterator.

[EmptyOrderedMapIterator()](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyOrderedMapIterator.html#EmptyOrderedMapIterator--) - Constructor for class org.apache.commons.collections4.iterators.[EmptyOrderedMapIterator](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyOrderedMapIterator.html)

Constructor.

[emptyOrderedMapIterator()](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyOrderedMapIterator.html#emptyOrderedMapIterator--) - Static method in class org.apache.commons.collections4.iterators.[EmptyOrderedMapIterator](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyOrderedMapIterator.html)

Get a typed instance of the iterator.

[emptyOrderedMapIterator()](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#emptyOrderedMapIterator--) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets an empty ordered map iterator.

[emptyQueue()](http://docs.google.com/org/apache/commons/collections4/QueueUtils.html#emptyQueue--) - Static method in class org.apache.commons.collections4.[QueueUtils](http://docs.google.com/org/apache/commons/collections4/QueueUtils.html)

Get an empty Queue.

[emptySet()](http://docs.google.com/org/apache/commons/collections4/SetUtils.html#emptySet--) - Static method in class org.apache.commons.collections4.[SetUtils](http://docs.google.com/org/apache/commons/collections4/SetUtils.html)

Get a typed empty unmodifiable Set.

[emptySortedBag()](http://docs.google.com/org/apache/commons/collections4/BagUtils.html#emptySortedBag--) - Static method in class org.apache.commons.collections4.[BagUtils](http://docs.google.com/org/apache/commons/collections4/BagUtils.html)

Get an empty SortedBag.

[emptySortedSet()](http://docs.google.com/org/apache/commons/collections4/SetUtils.html#emptySortedSet--) - Static method in class org.apache.commons.collections4.[SetUtils](http://docs.google.com/org/apache/commons/collections4/SetUtils.html)

Get a typed empty unmodifiable sorted set.

[ensureCapacity(int)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#ensureCapacity-int-) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Changes the size of the data structure to the capacity proposed.

[entries()](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html#entries--) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html)   [entries()](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html#entries--) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMapDecorator](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html)   [entries()](http://docs.google.com/org/apache/commons/collections4/multimap/UnmodifiableMultiValuedMap.html#entries--) - Method in class org.apache.commons.collections4.multimap.[UnmodifiableMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/UnmodifiableMultiValuedMap.html)   [entries()](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html#entries--) - Method in interface org.apache.commons.collections4.[MultiValuedMap](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html)

Returns a [Collection](https://docs.oracle.com/javase/7/docs/api/java/util/Collection.html?is-external=true) view of the mappings contained in this multi-valued map.

[entryAfter(AbstractLinkedMap.LinkEntry<K, V>)](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html#entryAfter-org.apache.commons.collections4.map.AbstractLinkedMap.LinkEntry-) - Method in class org.apache.commons.collections4.map.[AbstractLinkedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html)

Gets the after field from a LinkEntry.

[entryBefore(AbstractLinkedMap.LinkEntry<K, V>)](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html#entryBefore-org.apache.commons.collections4.map.AbstractLinkedMap.LinkEntry-) - Method in class org.apache.commons.collections4.map.[AbstractLinkedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html)

Gets the before field from a LinkEntry.

[entryHashCode(AbstractHashedMap.HashEntry<K, V>)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#entryHashCode-org.apache.commons.collections4.map.AbstractHashedMap.HashEntry-) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Gets the hashCode field from a HashEntry.

[entryKey(AbstractHashedMap.HashEntry<K, V>)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#entryKey-org.apache.commons.collections4.map.AbstractHashedMap.HashEntry-) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Gets the key field from a HashEntry.

[entryNext(AbstractHashedMap.HashEntry<K, V>)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#entryNext-org.apache.commons.collections4.map.AbstractHashedMap.HashEntry-) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Gets the next field from a HashEntry.

[entrySet()](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html#entrySet--) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html)

Gets an entrySet view of the map.

[EntrySet(AbstractDualBidiMap<K, V>)](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.EntrySet.html#EntrySet-org.apache.commons.collections4.bidimap.AbstractDualBidiMap-) - Constructor for class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.EntrySet](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.EntrySet.html)

Constructs a new view of the BidiMap.

[entrySet()](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html#entrySet--) - Method in class org.apache.commons.collections4.bidimap.[TreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html)

Returns a set view of the entries contained in this map in key order.

[entrySet()](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableBidiMap.html#entrySet--) - Method in class org.apache.commons.collections4.bidimap.[UnmodifiableBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableBidiMap.html)   [entrySet()](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableOrderedBidiMap.html#entrySet--) - Method in class org.apache.commons.collections4.bidimap.[UnmodifiableOrderedBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableOrderedBidiMap.html)   [entrySet()](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableSortedBidiMap.html#entrySet--) - Method in class org.apache.commons.collections4.bidimap.[UnmodifiableSortedBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableSortedBidiMap.html)   [entrySet()](http://docs.google.com/org/apache/commons/collections4/Get.html#entrySet--) - Method in interface org.apache.commons.collections4.[Get](http://docs.google.com/org/apache/commons/collections4/Get.html)   [entrySet()](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#entrySet--) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Gets the entrySet view of the map.

[EntrySet(AbstractHashedMap<K, V>)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.EntrySet.html#EntrySet-org.apache.commons.collections4.map.AbstractHashedMap-) - Constructor for class org.apache.commons.collections4.map.[AbstractHashedMap.EntrySet](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.EntrySet.html)   [entrySet()](http://docs.google.com/org/apache/commons/collections4/map/AbstractMapDecorator.html#entrySet--) - Method in class org.apache.commons.collections4.map.[AbstractMapDecorator](http://docs.google.com/org/apache/commons/collections4/map/AbstractMapDecorator.html)   [entrySet()](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html#entrySet--) - Method in class org.apache.commons.collections4.map.[AbstractReferenceMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html)

Returns a set view of this map's entries.

[entrySet()](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html#entrySet--) - Method in class org.apache.commons.collections4.map.[CompositeMap](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html)

Returns a set view of the mappings contained in this map.

[entrySet()](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeMap.html#entrySet--) - Method in class org.apache.commons.collections4.map.[FixedSizeMap](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeMap.html)   [entrySet()](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeSortedMap.html#entrySet--) - Method in class org.apache.commons.collections4.map.[FixedSizeSortedMap](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeSortedMap.html)   [entrySet()](http://docs.google.com/org/apache/commons/collections4/map/Flat3Map.html#entrySet--) - Method in class org.apache.commons.collections4.map.[Flat3Map](http://docs.google.com/org/apache/commons/collections4/map/Flat3Map.html)

Gets the entrySet view of the map.

[entrySet()](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html#entrySet--) - Method in class org.apache.commons.collections4.map.[ListOrderedMap](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html)

Gets a view over the entries in the map.

[entrySet()](http://docs.google.com/org/apache/commons/collections4/map/MultiValueMap.html#entrySet--) - Method in class org.apache.commons.collections4.map.[MultiValueMap](http://docs.google.com/org/apache/commons/collections4/map/MultiValueMap.html)

Deprecated.

[entrySet()](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.html#entrySet--) - Method in class org.apache.commons.collections4.map.[PassiveExpiringMap](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.html)

All expired entries are removed from the map prior to returning the entry set.

[entrySet()](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html#entrySet--) - Method in class org.apache.commons.collections4.map.[SingletonMap](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html)

Gets the entrySet view of the map.

[entrySet()](http://docs.google.com/org/apache/commons/collections4/map/StaticBucketMap.html#entrySet--) - Method in class org.apache.commons.collections4.map.[StaticBucketMap](http://docs.google.com/org/apache/commons/collections4/map/StaticBucketMap.html)

Gets the entry set.

[entrySet()](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableMap.html#entrySet--) - Method in class org.apache.commons.collections4.map.[UnmodifiableMap](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableMap.html)   [entrySet()](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableOrderedMap.html#entrySet--) - Method in class org.apache.commons.collections4.map.[UnmodifiableOrderedMap](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableOrderedMap.html)   [entrySet()](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableSortedMap.html#entrySet--) - Method in class org.apache.commons.collections4.map.[UnmodifiableSortedMap](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableSortedMap.html)   [entrySet()](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html#entrySet--) - Method in class org.apache.commons.collections4.multiset.[AbstractMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html)

Returns an unmodifiable view of the entries of this multiset.

[EntrySet(AbstractMultiSet<E>)](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.EntrySet.html#EntrySet-org.apache.commons.collections4.multiset.AbstractMultiSet-) - Constructor for class org.apache.commons.collections4.multiset.[AbstractMultiSet.EntrySet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.EntrySet.html)

Constructs a new view of the MultiSet.

[entrySet()](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSetDecorator.html#entrySet--) - Method in class org.apache.commons.collections4.multiset.[AbstractMultiSetDecorator](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSetDecorator.html)   [entrySet()](http://docs.google.com/org/apache/commons/collections4/MultiSet.html#entrySet--) - Method in interface org.apache.commons.collections4.[MultiSet](http://docs.google.com/org/apache/commons/collections4/MultiSet.html)

Returns a [Set](https://docs.oracle.com/javase/7/docs/api/java/util/Set.html?is-external=true) of all entries contained in the MultiSet.

[entrySet()](http://docs.google.com/org/apache/commons/collections4/multiset/PredicatedMultiSet.html#entrySet--) - Method in class org.apache.commons.collections4.multiset.[PredicatedMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/PredicatedMultiSet.html)   [entrySet()](http://docs.google.com/org/apache/commons/collections4/multiset/SynchronizedMultiSet.html#entrySet--) - Method in class org.apache.commons.collections4.multiset.[SynchronizedMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/SynchronizedMultiSet.html)   [entrySet()](http://docs.google.com/org/apache/commons/collections4/multiset/UnmodifiableMultiSet.html#entrySet--) - Method in class org.apache.commons.collections4.multiset.[UnmodifiableMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/UnmodifiableMultiSet.html)   [entrySet()](http://docs.google.com/org/apache/commons/collections4/splitmap/AbstractIterableGetMapDecorator.html#entrySet--) - Method in class org.apache.commons.collections4.splitmap.[AbstractIterableGetMapDecorator](http://docs.google.com/org/apache/commons/collections4/splitmap/AbstractIterableGetMapDecorator.html)   [entrySet()](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html#entrySet--) - Method in class org.apache.commons.collections4.trie.[UnmodifiableTrie](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html)   [EntrySetIterator(Iterator<Map.Entry<K, V>>, AbstractDualBidiMap<K, V>)](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.EntrySetIterator.html#EntrySetIterator-java.util.Iterator-org.apache.commons.collections4.bidimap.AbstractDualBidiMap-) - Constructor for class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.EntrySetIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.EntrySetIterator.html)

Constructor.

[EntrySetIterator(AbstractHashedMap<K, V>)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.EntrySetIterator.html#EntrySetIterator-org.apache.commons.collections4.map.AbstractHashedMap-) - Constructor for class org.apache.commons.collections4.map.[AbstractHashedMap.EntrySetIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.EntrySetIterator.html)   [EntrySetIterator(AbstractLinkedMap<K, V>)](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.EntrySetIterator.html#EntrySetIterator-org.apache.commons.collections4.map.AbstractLinkedMap-) - Constructor for class org.apache.commons.collections4.map.[AbstractLinkedMap.EntrySetIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.EntrySetIterator.html)   [EntrySetIterator(Iterator<Map.Entry<E, AbstractMapMultiSet.MutableInteger>>, AbstractMapMultiSet<E>)](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.EntrySetIterator.html#EntrySetIterator-java.util.Iterator-org.apache.commons.collections4.multiset.AbstractMapMultiSet-) - Constructor for class org.apache.commons.collections4.multiset.[AbstractMapMultiSet.EntrySetIterator](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.EntrySetIterator.html)

Constructor.

[EntrySetMapIterator](http://docs.google.com/org/apache/commons/collections4/iterators/EntrySetMapIterator.html)<[K](http://docs.google.com/org/apache/commons/collections4/iterators/EntrySetMapIterator.html),[V](http://docs.google.com/org/apache/commons/collections4/iterators/EntrySetMapIterator.html)> - Class in [org.apache.commons.collections4.iterators](http://docs.google.com/org/apache/commons/collections4/iterators/package-summary.html)

Implements a MapIterator using a Map entrySet.

[EntrySetMapIterator(Map<K, V>)](http://docs.google.com/org/apache/commons/collections4/iterators/EntrySetMapIterator.html#EntrySetMapIterator-java.util.Map-) - Constructor for class org.apache.commons.collections4.iterators.[EntrySetMapIterator](http://docs.google.com/org/apache/commons/collections4/iterators/EntrySetMapIterator.html)

Constructor.

[EntrySetToMapIteratorAdapter](http://docs.google.com/org/apache/commons/collections4/map/EntrySetToMapIteratorAdapter.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/EntrySetToMapIteratorAdapter.html),[V](http://docs.google.com/org/apache/commons/collections4/map/EntrySetToMapIteratorAdapter.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

Adapts a Map entrySet to the MapIterator interface.

[EntrySetToMapIteratorAdapter(Set<Map.Entry<K, V>>)](http://docs.google.com/org/apache/commons/collections4/map/EntrySetToMapIteratorAdapter.html#EntrySetToMapIteratorAdapter-java.util.Set-) - Constructor for class org.apache.commons.collections4.map.[EntrySetToMapIteratorAdapter](http://docs.google.com/org/apache/commons/collections4/map/EntrySetToMapIteratorAdapter.html)

Create a new EntrySetToMapIteratorAdapter.

[entryValue(AbstractHashedMap.HashEntry<K, V>)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#entryValue-org.apache.commons.collections4.map.AbstractHashedMap.HashEntry-) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Gets the value field from a HashEntry.

[EnumerationIterator](http://docs.google.com/org/apache/commons/collections4/iterators/EnumerationIterator.html)<[E](http://docs.google.com/org/apache/commons/collections4/iterators/EnumerationIterator.html)> - Class in [org.apache.commons.collections4.iterators](http://docs.google.com/org/apache/commons/collections4/iterators/package-summary.html)

Adapter to make [Enumeration](https://docs.oracle.com/javase/7/docs/api/java/util/Enumeration.html?is-external=true) instances appear to be [Iterator](https://docs.oracle.com/javase/7/docs/api/java/util/Iterator.html?is-external=true) instances.

[EnumerationIterator()](http://docs.google.com/org/apache/commons/collections4/iterators/EnumerationIterator.html#EnumerationIterator--) - Constructor for class org.apache.commons.collections4.iterators.[EnumerationIterator](http://docs.google.com/org/apache/commons/collections4/iterators/EnumerationIterator.html)

Constructs a new EnumerationIterator that will not function until [EnumerationIterator.setEnumeration(Enumeration)](http://docs.google.com/org/apache/commons/collections4/iterators/EnumerationIterator.html#setEnumeration-java.util.Enumeration-) is called.

[EnumerationIterator(Enumeration<? extends E>)](http://docs.google.com/org/apache/commons/collections4/iterators/EnumerationIterator.html#EnumerationIterator-java.util.Enumeration-) - Constructor for class org.apache.commons.collections4.iterators.[EnumerationIterator](http://docs.google.com/org/apache/commons/collections4/iterators/EnumerationIterator.html)

Constructs a new EnumerationIterator that provides an iterator view of the given enumeration.

[EnumerationIterator(Enumeration<? extends E>, Collection<? super E>)](http://docs.google.com/org/apache/commons/collections4/iterators/EnumerationIterator.html#EnumerationIterator-java.util.Enumeration-java.util.Collection-) - Constructor for class org.apache.commons.collections4.iterators.[EnumerationIterator](http://docs.google.com/org/apache/commons/collections4/iterators/EnumerationIterator.html)

Constructs a new EnumerationIterator that will remove elements from the specified collection.

[EnumerationUtils](http://docs.google.com/org/apache/commons/collections4/EnumerationUtils.html) - Class in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

Provides utility methods for [Enumeration](https://docs.oracle.com/javase/7/docs/api/java/util/Enumeration.html?is-external=true) instances.

[EQUAL\_BIT\_KEY](http://docs.google.com/org/apache/commons/collections4/trie/KeyAnalyzer.html#EQUAL_BIT_KEY) - Static variable in class org.apache.commons.collections4.trie.[KeyAnalyzer](http://docs.google.com/org/apache/commons/collections4/trie/KeyAnalyzer.html)

Returned by [KeyAnalyzer.bitIndex(Object, int, int, Object, int, int)](http://docs.google.com/org/apache/commons/collections4/trie/KeyAnalyzer.html#bitIndex-K-int-int-K-int-int-) if key and found key are equal.

[EqualPredicate](http://docs.google.com/org/apache/commons/collections4/functors/EqualPredicate.html)<[T](http://docs.google.com/org/apache/commons/collections4/functors/EqualPredicate.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Predicate implementation that returns true if the input is the same object as the one stored in this predicate by equals.

[EqualPredicate(T)](http://docs.google.com/org/apache/commons/collections4/functors/EqualPredicate.html#EqualPredicate-T-) - Constructor for class org.apache.commons.collections4.functors.[EqualPredicate](http://docs.google.com/org/apache/commons/collections4/functors/EqualPredicate.html)

Constructor that performs no validation.

[EqualPredicate(T, Equator<T>)](http://docs.google.com/org/apache/commons/collections4/functors/EqualPredicate.html#EqualPredicate-T-org.apache.commons.collections4.Equator-) - Constructor for class org.apache.commons.collections4.functors.[EqualPredicate](http://docs.google.com/org/apache/commons/collections4/functors/EqualPredicate.html)

Constructor that performs no validation.

[equalPredicate(T)](http://docs.google.com/org/apache/commons/collections4/functors/EqualPredicate.html#equalPredicate-T-) - Static method in class org.apache.commons.collections4.functors.[EqualPredicate](http://docs.google.com/org/apache/commons/collections4/functors/EqualPredicate.html)

Factory to create the predicate.

[equalPredicate(T, Equator<T>)](http://docs.google.com/org/apache/commons/collections4/functors/EqualPredicate.html#equalPredicate-T-org.apache.commons.collections4.Equator-) - Static method in class org.apache.commons.collections4.functors.[EqualPredicate](http://docs.google.com/org/apache/commons/collections4/functors/EqualPredicate.html)

Factory to create the identity predicate.

[equalPredicate(T)](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html#equalPredicate-T-) - Static method in class org.apache.commons.collections4.[PredicateUtils](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html)

Creates a Predicate that checks if the input object is equal to the specified object using equals().

[equals(Object)](http://docs.google.com/org/apache/commons/collections4/bag/AbstractBagDecorator.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.bag.[AbstractBagDecorator](http://docs.google.com/org/apache/commons/collections4/bag/AbstractBagDecorator.html)   [equals(Object)](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.bag.[AbstractMapBag](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html)

Compares this Bag to another.

[equals(Object)](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.MutableInteger.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.bag.[AbstractMapBag.MutableInteger](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.MutableInteger.html)   [equals(Object)](http://docs.google.com/org/apache/commons/collections4/bag/PredicatedBag.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.bag.[PredicatedBag](http://docs.google.com/org/apache/commons/collections4/bag/PredicatedBag.html)   [equals(Object)](http://docs.google.com/org/apache/commons/collections4/bag/SynchronizedBag.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.bag.[SynchronizedBag](http://docs.google.com/org/apache/commons/collections4/bag/SynchronizedBag.html)   [equals(Object)](http://docs.google.com/org/apache/commons/collections4/bag/TransformedBag.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.bag.[TransformedBag](http://docs.google.com/org/apache/commons/collections4/bag/TransformedBag.html)   [equals(Object)](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html)   [equals(Object)](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.View.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.View](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.View.html)   [equals(Object)](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.bidimap.[TreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html)

Compares for equals as per the API.

[equals(Object)](http://docs.google.com/org/apache/commons/collections4/collection/SynchronizedCollection.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.collection.[SynchronizedCollection](http://docs.google.com/org/apache/commons/collections4/collection/SynchronizedCollection.html)   [equals(Object)](http://docs.google.com/org/apache/commons/collections4/comparators/BooleanComparator.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.comparators.[BooleanComparator](http://docs.google.com/org/apache/commons/collections4/comparators/BooleanComparator.html)

Returns true iff *that* Object is is a [Comparator](https://docs.oracle.com/javase/7/docs/api/java/util/Comparator.html?is-external=true) whose ordering is known to be equivalent to mine.

[equals(Object)](http://docs.google.com/org/apache/commons/collections4/comparators/ComparableComparator.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.comparators.[ComparableComparator](http://docs.google.com/org/apache/commons/collections4/comparators/ComparableComparator.html)

Returns true iff *that* Object is is a [Comparator](https://docs.oracle.com/javase/7/docs/api/java/util/Comparator.html?is-external=true) whose ordering is known to be equivalent to mine.

[equals(Object)](http://docs.google.com/org/apache/commons/collections4/comparators/ComparatorChain.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.comparators.[ComparatorChain](http://docs.google.com/org/apache/commons/collections4/comparators/ComparatorChain.html)

Returns true iff *that* Object is is a [Comparator](https://docs.oracle.com/javase/7/docs/api/java/util/Comparator.html?is-external=true) whose ordering is known to be equivalent to mine.

[equals(Object)](http://docs.google.com/org/apache/commons/collections4/comparators/FixedOrderComparator.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.comparators.[FixedOrderComparator](http://docs.google.com/org/apache/commons/collections4/comparators/FixedOrderComparator.html)

Returns true iff *that* Object is is a [Comparator](https://docs.oracle.com/javase/7/docs/api/java/util/Comparator.html?is-external=true) whose ordering is known to be equivalent to mine.

[equals(Object)](http://docs.google.com/org/apache/commons/collections4/comparators/NullComparator.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.comparators.[NullComparator](http://docs.google.com/org/apache/commons/collections4/comparators/NullComparator.html)

Determines whether the specified object represents a comparator that is equal to this comparator.

[equals(Object)](http://docs.google.com/org/apache/commons/collections4/comparators/ReverseComparator.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.comparators.[ReverseComparator](http://docs.google.com/org/apache/commons/collections4/comparators/ReverseComparator.html)

Returns true iff *that* Object is is a [Comparator](https://docs.oracle.com/javase/7/docs/api/java/util/Comparator.html?is-external=true) whose ordering is known to be equivalent to mine.

[equals(Object)](http://docs.google.com/org/apache/commons/collections4/comparators/TransformingComparator.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.comparators.[TransformingComparator](http://docs.google.com/org/apache/commons/collections4/comparators/TransformingComparator.html)

Returns true iff *that* Object is is a [Comparator](https://docs.oracle.com/javase/7/docs/api/java/util/Comparator.html?is-external=true) whose ordering is known to be equivalent to mine.

[equals(Object)](http://docs.google.com/org/apache/commons/collections4/functors/ConstantTransformer.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.functors.[ConstantTransformer](http://docs.google.com/org/apache/commons/collections4/functors/ConstantTransformer.html) [equals(Object)](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractMapEntry.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.keyvalue.[AbstractMapEntry](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractMapEntry.html)

Compares this Map.Entry with another Map.Entry.

[equals(Object)](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractMapEntryDecorator.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.keyvalue.[AbstractMapEntryDecorator](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractMapEntryDecorator.html)   [equals(Object)](http://docs.google.com/org/apache/commons/collections4/keyvalue/DefaultKeyValue.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.keyvalue.[DefaultKeyValue](http://docs.google.com/org/apache/commons/collections4/keyvalue/DefaultKeyValue.html)

Compares this Map.Entry with another Map.Entry.

[equals(Object)](http://docs.google.com/org/apache/commons/collections4/keyvalue/MultiKey.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.keyvalue.[MultiKey](http://docs.google.com/org/apache/commons/collections4/keyvalue/MultiKey.html)

Compares this object to another.

[equals(Object)](http://docs.google.com/org/apache/commons/collections4/keyvalue/TiedMapEntry.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.keyvalue.[TiedMapEntry](http://docs.google.com/org/apache/commons/collections4/keyvalue/TiedMapEntry.html)

Compares this Map.Entry with another Map.Entry.

[equals(Object)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)   [equals(Object)](http://docs.google.com/org/apache/commons/collections4/list/AbstractListDecorator.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.list.[AbstractListDecorator](http://docs.google.com/org/apache/commons/collections4/list/AbstractListDecorator.html)   [equals(Object)](http://docs.google.com/org/apache/commons/collections4/list/PredicatedList.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.list.[PredicatedList](http://docs.google.com/org/apache/commons/collections4/list/PredicatedList.html)   [equals(Object)](http://docs.google.com/org/apache/commons/collections4/list/TransformedList.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.list.[TransformedList](http://docs.google.com/org/apache/commons/collections4/list/TransformedList.html)   [equals(Object)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Compares this map with another.

[equals(Object)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap.HashEntry](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html)   [equals(Object)](http://docs.google.com/org/apache/commons/collections4/map/AbstractMapDecorator.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[AbstractMapDecorator](http://docs.google.com/org/apache/commons/collections4/map/AbstractMapDecorator.html)   [equals(Object)](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[AbstractReferenceMap.ReferenceEntry](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html)

Compares this map entry to another.

[equals(Object)](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[CompositeMap](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html)

Checks if this Map equals another as per the Map specification.

[equals(Object)](http://docs.google.com/org/apache/commons/collections4/map/Flat3Map.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[Flat3Map](http://docs.google.com/org/apache/commons/collections4/map/Flat3Map.html)

Compares this map with another.

[equals(Object)](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[SingletonMap](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html)

Compares this map with another.

[equals(Object)](http://docs.google.com/org/apache/commons/collections4/map/StaticBucketMap.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[StaticBucketMap](http://docs.google.com/org/apache/commons/collections4/map/StaticBucketMap.html)

Compares this map to another, as per the Map specification.

[equals(Object)](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html)   [equals(Object)](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMapDecorator](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html)   [equals(Object)](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.multiset.[AbstractMapMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.html)   [equals(Object)](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.MutableInteger.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.multiset.[AbstractMapMultiSet.MutableInteger](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.MutableInteger.html)   [equals(Object)](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.AbstractEntry.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.multiset.[AbstractMultiSet.AbstractEntry](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.AbstractEntry.html)   [equals(Object)](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.multiset.[AbstractMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html)   [equals(Object)](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSetDecorator.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.multiset.[AbstractMultiSetDecorator](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSetDecorator.html)   [equals(Object)](http://docs.google.com/org/apache/commons/collections4/MultiSet.Entry.html#equals-java.lang.Object-) - Method in interface org.apache.commons.collections4.[MultiSet.Entry](http://docs.google.com/org/apache/commons/collections4/MultiSet.Entry.html)

Compares the specified object with this entry for equality.

[equals(Object)](http://docs.google.com/org/apache/commons/collections4/MultiSet.html#equals-java.lang.Object-) - Method in interface org.apache.commons.collections4.[MultiSet](http://docs.google.com/org/apache/commons/collections4/MultiSet.html)

Compares this MultiSet to another object.

[equals(Object)](http://docs.google.com/org/apache/commons/collections4/multiset/PredicatedMultiSet.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.multiset.[PredicatedMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/PredicatedMultiSet.html)   [equals(Object)](http://docs.google.com/org/apache/commons/collections4/multiset/SynchronizedMultiSet.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.multiset.[SynchronizedMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/SynchronizedMultiSet.html)   [equals(Object)](http://docs.google.com/org/apache/commons/collections4/queue/SynchronizedQueue.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.queue.[SynchronizedQueue](http://docs.google.com/org/apache/commons/collections4/queue/SynchronizedQueue.html)   [equals(Object)](http://docs.google.com/org/apache/commons/collections4/set/AbstractSetDecorator.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.set.[AbstractSetDecorator](http://docs.google.com/org/apache/commons/collections4/set/AbstractSetDecorator.html)   [equals(Object)](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.set.[CompositeSet](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html) [equals(Object)](http://docs.google.com/org/apache/commons/collections4/set/MapBackedSet.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.set.[MapBackedSet](http://docs.google.com/org/apache/commons/collections4/set/MapBackedSet.html)   [equals(Object)](http://docs.google.com/org/apache/commons/collections4/set/PredicatedSet.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.set.[PredicatedSet](http://docs.google.com/org/apache/commons/collections4/set/PredicatedSet.html)   [equals(Object)](http://docs.google.com/org/apache/commons/collections4/set/TransformedSet.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.set.[TransformedSet](http://docs.google.com/org/apache/commons/collections4/set/TransformedSet.html)   [equals(Object)](http://docs.google.com/org/apache/commons/collections4/splitmap/AbstractIterableGetMapDecorator.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.splitmap.[AbstractIterableGetMapDecorator](http://docs.google.com/org/apache/commons/collections4/splitmap/AbstractIterableGetMapDecorator.html)   [equals(Object)](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html#equals-java.lang.Object-) - Method in class org.apache.commons.collections4.trie.[UnmodifiableTrie](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html)   [equate(T, T)](http://docs.google.com/org/apache/commons/collections4/Equator.html#equate-T-T-) - Method in interface org.apache.commons.collections4.[Equator](http://docs.google.com/org/apache/commons/collections4/Equator.html)

Evaluates the two arguments for their equality.

[equate(T, T)](http://docs.google.com/org/apache/commons/collections4/functors/DefaultEquator.html#equate-T-T-) - Method in class org.apache.commons.collections4.functors.[DefaultEquator](http://docs.google.com/org/apache/commons/collections4/functors/DefaultEquator.html)

Evaluates the two arguments for their equality.

[Equator](http://docs.google.com/org/apache/commons/collections4/Equator.html)<[T](http://docs.google.com/org/apache/commons/collections4/Equator.html)> - Interface in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

An equation function, which determines equality between objects of type T.

[eval()](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html#eval--) - Method in class org.apache.commons.collections4.[FluentIterable](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html)

This method fully traverses an iterator of this iterable and returns a new iterable with the same contents, but without any reference to the originating iterables and/or iterators.

[evaluate(T)](http://docs.google.com/org/apache/commons/collections4/functors/AllPredicate.html#evaluate-T-) - Method in class org.apache.commons.collections4.functors.[AllPredicate](http://docs.google.com/org/apache/commons/collections4/functors/AllPredicate.html)

Evaluates the predicate returning true if all predicates return true.

[evaluate(T)](http://docs.google.com/org/apache/commons/collections4/functors/AndPredicate.html#evaluate-T-) - Method in class org.apache.commons.collections4.functors.[AndPredicate](http://docs.google.com/org/apache/commons/collections4/functors/AndPredicate.html)

Evaluates the predicate returning true if both predicates return true.

[evaluate(T)](http://docs.google.com/org/apache/commons/collections4/functors/AnyPredicate.html#evaluate-T-) - Method in class org.apache.commons.collections4.functors.[AnyPredicate](http://docs.google.com/org/apache/commons/collections4/functors/AnyPredicate.html)

Evaluates the predicate returning true if any predicate returns true.

[evaluate(T)](http://docs.google.com/org/apache/commons/collections4/functors/ComparatorPredicate.html#evaluate-T-) - Method in class org.apache.commons.collections4.functors.[ComparatorPredicate](http://docs.google.com/org/apache/commons/collections4/functors/ComparatorPredicate.html)

Evaluates the predicate.

[evaluate(T)](http://docs.google.com/org/apache/commons/collections4/functors/EqualPredicate.html#evaluate-T-) - Method in class org.apache.commons.collections4.functors.[EqualPredicate](http://docs.google.com/org/apache/commons/collections4/functors/EqualPredicate.html)

Evaluates the predicate returning true if the input equals the stored value.

[evaluate(T)](http://docs.google.com/org/apache/commons/collections4/functors/ExceptionPredicate.html#evaluate-T-) - Method in class org.apache.commons.collections4.functors.[ExceptionPredicate](http://docs.google.com/org/apache/commons/collections4/functors/ExceptionPredicate.html)

Evaluates the predicate always throwing an exception.

[evaluate(T)](http://docs.google.com/org/apache/commons/collections4/functors/FalsePredicate.html#evaluate-T-) - Method in class org.apache.commons.collections4.functors.[FalsePredicate](http://docs.google.com/org/apache/commons/collections4/functors/FalsePredicate.html)

Evaluates the predicate returning false always.

[evaluate(T)](http://docs.google.com/org/apache/commons/collections4/functors/IdentityPredicate.html#evaluate-T-) - Method in class org.apache.commons.collections4.functors.[IdentityPredicate](http://docs.google.com/org/apache/commons/collections4/functors/IdentityPredicate.html)

Evaluates the predicate returning true if the input object is identical to the stored object.

[evaluate(Object)](http://docs.google.com/org/apache/commons/collections4/functors/InstanceofPredicate.html#evaluate-java.lang.Object-) - Method in class org.apache.commons.collections4.functors.[InstanceofPredicate](http://docs.google.com/org/apache/commons/collections4/functors/InstanceofPredicate.html)

Evaluates the predicate returning true if the input object is of the correct type.

[evaluate(T)](http://docs.google.com/org/apache/commons/collections4/functors/NonePredicate.html#evaluate-T-) - Method in class org.apache.commons.collections4.functors.[NonePredicate](http://docs.google.com/org/apache/commons/collections4/functors/NonePredicate.html)

Evaluates the predicate returning false if any stored predicate returns false.

[evaluate(T)](http://docs.google.com/org/apache/commons/collections4/functors/NotNullPredicate.html#evaluate-T-) - Method in class org.apache.commons.collections4.functors.[NotNullPredicate](http://docs.google.com/org/apache/commons/collections4/functors/NotNullPredicate.html)

Evaluates the predicate returning true if the object does not equal null.

[evaluate(T)](http://docs.google.com/org/apache/commons/collections4/functors/NotPredicate.html#evaluate-T-) - Method in class org.apache.commons.collections4.functors.[NotPredicate](http://docs.google.com/org/apache/commons/collections4/functors/NotPredicate.html)

Evaluates the predicate returning the opposite to the stored predicate.

[evaluate(T)](http://docs.google.com/org/apache/commons/collections4/functors/NullIsExceptionPredicate.html#evaluate-T-) - Method in class org.apache.commons.collections4.functors.[NullIsExceptionPredicate](http://docs.google.com/org/apache/commons/collections4/functors/NullIsExceptionPredicate.html)

Evaluates the predicate returning the result of the decorated predicate once a null check is performed.

[evaluate(T)](http://docs.google.com/org/apache/commons/collections4/functors/NullIsFalsePredicate.html#evaluate-T-) - Method in class org.apache.commons.collections4.functors.[NullIsFalsePredicate](http://docs.google.com/org/apache/commons/collections4/functors/NullIsFalsePredicate.html)

Evaluates the predicate returning the result of the decorated predicate once a null check is performed.

[evaluate(T)](http://docs.google.com/org/apache/commons/collections4/functors/NullIsTruePredicate.html#evaluate-T-) - Method in class org.apache.commons.collections4.functors.[NullIsTruePredicate](http://docs.google.com/org/apache/commons/collections4/functors/NullIsTruePredicate.html)

Evaluates the predicate returning the result of the decorated predicate once a null check is performed.

[evaluate(T)](http://docs.google.com/org/apache/commons/collections4/functors/NullPredicate.html#evaluate-T-) - Method in class org.apache.commons.collections4.functors.[NullPredicate](http://docs.google.com/org/apache/commons/collections4/functors/NullPredicate.html)

Evaluates the predicate returning true if the input is null.

[evaluate(T)](http://docs.google.com/org/apache/commons/collections4/functors/OnePredicate.html#evaluate-T-) - Method in class org.apache.commons.collections4.functors.[OnePredicate](http://docs.google.com/org/apache/commons/collections4/functors/OnePredicate.html)

Evaluates the predicate returning true if only one decorated predicate returns true.

[evaluate(T)](http://docs.google.com/org/apache/commons/collections4/functors/OrPredicate.html#evaluate-T-) - Method in class org.apache.commons.collections4.functors.[OrPredicate](http://docs.google.com/org/apache/commons/collections4/functors/OrPredicate.html)

Evaluates the predicate returning true if either predicate returns true.

[evaluate(T)](http://docs.google.com/org/apache/commons/collections4/functors/TransformedPredicate.html#evaluate-T-) - Method in class org.apache.commons.collections4.functors.[TransformedPredicate](http://docs.google.com/org/apache/commons/collections4/functors/TransformedPredicate.html)

Evaluates the predicate returning the result of the decorated predicate once the input has been transformed

[evaluate(T)](http://docs.google.com/org/apache/commons/collections4/functors/TransformerPredicate.html#evaluate-T-) - Method in class org.apache.commons.collections4.functors.[TransformerPredicate](http://docs.google.com/org/apache/commons/collections4/functors/TransformerPredicate.html)

Evaluates the predicate returning the result of the decorated transformer.

[evaluate(T)](http://docs.google.com/org/apache/commons/collections4/functors/TruePredicate.html#evaluate-T-) - Method in class org.apache.commons.collections4.functors.[TruePredicate](http://docs.google.com/org/apache/commons/collections4/functors/TruePredicate.html)

Evaluates the predicate returning true always.

[evaluate(T)](http://docs.google.com/org/apache/commons/collections4/functors/UniquePredicate.html#evaluate-T-) - Method in class org.apache.commons.collections4.functors.[UniquePredicate](http://docs.google.com/org/apache/commons/collections4/functors/UniquePredicate.html)

Evaluates the predicate returning true if the input object hasn't been received yet.

[evaluate(T)](http://docs.google.com/org/apache/commons/collections4/Predicate.html#evaluate-T-) - Method in interface org.apache.commons.collections4.[Predicate](http://docs.google.com/org/apache/commons/collections4/Predicate.html)

Use the specified parameter to perform a test that returns true or false.

[exceptionClosure()](http://docs.google.com/org/apache/commons/collections4/ClosureUtils.html#exceptionClosure--) - Static method in class org.apache.commons.collections4.[ClosureUtils](http://docs.google.com/org/apache/commons/collections4/ClosureUtils.html)

Gets a Closure that always throws an exception.

[ExceptionClosure](http://docs.google.com/org/apache/commons/collections4/functors/ExceptionClosure.html)<[E](http://docs.google.com/org/apache/commons/collections4/functors/ExceptionClosure.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Closure implementation that always throws an exception.

[exceptionClosure()](http://docs.google.com/org/apache/commons/collections4/functors/ExceptionClosure.html#exceptionClosure--) - Static method in class org.apache.commons.collections4.functors.[ExceptionClosure](http://docs.google.com/org/apache/commons/collections4/functors/ExceptionClosure.html)

Factory returning the singleton instance.

[exceptionFactory()](http://docs.google.com/org/apache/commons/collections4/FactoryUtils.html#exceptionFactory--) - Static method in class org.apache.commons.collections4.[FactoryUtils](http://docs.google.com/org/apache/commons/collections4/FactoryUtils.html)

Gets a Factory that always throws an exception.

[ExceptionFactory](http://docs.google.com/org/apache/commons/collections4/functors/ExceptionFactory.html)<[T](http://docs.google.com/org/apache/commons/collections4/functors/ExceptionFactory.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Factory implementation that always throws an exception.

[exceptionFactory()](http://docs.google.com/org/apache/commons/collections4/functors/ExceptionFactory.html#exceptionFactory--) - Static method in class org.apache.commons.collections4.functors.[ExceptionFactory](http://docs.google.com/org/apache/commons/collections4/functors/ExceptionFactory.html)

Factory returning the singleton instance.

[ExceptionPredicate](http://docs.google.com/org/apache/commons/collections4/functors/ExceptionPredicate.html)<[T](http://docs.google.com/org/apache/commons/collections4/functors/ExceptionPredicate.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Predicate implementation that always throws an exception.

[exceptionPredicate()](http://docs.google.com/org/apache/commons/collections4/functors/ExceptionPredicate.html#exceptionPredicate--) - Static method in class org.apache.commons.collections4.functors.[ExceptionPredicate](http://docs.google.com/org/apache/commons/collections4/functors/ExceptionPredicate.html)

Factory returning the singleton instance.

[exceptionPredicate()](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html#exceptionPredicate--) - Static method in class org.apache.commons.collections4.[PredicateUtils](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html)

Gets a Predicate that always throws an exception.

[ExceptionTransformer](http://docs.google.com/org/apache/commons/collections4/functors/ExceptionTransformer.html)<[I](http://docs.google.com/org/apache/commons/collections4/functors/ExceptionTransformer.html),[O](http://docs.google.com/org/apache/commons/collections4/functors/ExceptionTransformer.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Transformer implementation that always throws an exception.

[exceptionTransformer()](http://docs.google.com/org/apache/commons/collections4/functors/ExceptionTransformer.html#exceptionTransformer--) - Static method in class org.apache.commons.collections4.functors.[ExceptionTransformer](http://docs.google.com/org/apache/commons/collections4/functors/ExceptionTransformer.html)

Factory returning the singleton instance.

[exceptionTransformer()](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html#exceptionTransformer--) - Static method in class org.apache.commons.collections4.[TransformerUtils](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html)

Gets a transformer that always throws an exception.

[execute(T)](http://docs.google.com/org/apache/commons/collections4/Closure.html#execute-T-) - Method in interface org.apache.commons.collections4.[Closure](http://docs.google.com/org/apache/commons/collections4/Closure.html)

Performs an action on the specified input object.

[execute(E)](http://docs.google.com/org/apache/commons/collections4/functors/CatchAndRethrowClosure.html#execute-E-) - Method in class org.apache.commons.collections4.functors.[CatchAndRethrowClosure](http://docs.google.com/org/apache/commons/collections4/functors/CatchAndRethrowClosure.html)

Execute this closure on the specified input object.

[execute(E)](http://docs.google.com/org/apache/commons/collections4/functors/ChainedClosure.html#execute-E-) - Method in class org.apache.commons.collections4.functors.[ChainedClosure](http://docs.google.com/org/apache/commons/collections4/functors/ChainedClosure.html)

Execute a list of closures.

[execute(E)](http://docs.google.com/org/apache/commons/collections4/functors/ExceptionClosure.html#execute-E-) - Method in class org.apache.commons.collections4.functors.[ExceptionClosure](http://docs.google.com/org/apache/commons/collections4/functors/ExceptionClosure.html)

Always throw an exception.

[execute(E)](http://docs.google.com/org/apache/commons/collections4/functors/ForClosure.html#execute-E-) - Method in class org.apache.commons.collections4.functors.[ForClosure](http://docs.google.com/org/apache/commons/collections4/functors/ForClosure.html)

Executes the closure count times.

[execute(E)](http://docs.google.com/org/apache/commons/collections4/functors/IfClosure.html#execute-E-) - Method in class org.apache.commons.collections4.functors.[IfClosure](http://docs.google.com/org/apache/commons/collections4/functors/IfClosure.html)

Executes the true or false closure according to the result of the predicate.

[execute(E)](http://docs.google.com/org/apache/commons/collections4/functors/NOPClosure.html#execute-E-) - Method in class org.apache.commons.collections4.functors.[NOPClosure](http://docs.google.com/org/apache/commons/collections4/functors/NOPClosure.html)

Do nothing.

[execute(E)](http://docs.google.com/org/apache/commons/collections4/functors/SwitchClosure.html#execute-E-) - Method in class org.apache.commons.collections4.functors.[SwitchClosure](http://docs.google.com/org/apache/commons/collections4/functors/SwitchClosure.html)

Executes the closure whose matching predicate returns true

[execute(E)](http://docs.google.com/org/apache/commons/collections4/functors/TransformerClosure.html#execute-E-) - Method in class org.apache.commons.collections4.functors.[TransformerClosure](http://docs.google.com/org/apache/commons/collections4/functors/TransformerClosure.html)

Executes the closure by calling the decorated transformer.

[execute(E)](http://docs.google.com/org/apache/commons/collections4/functors/WhileClosure.html#execute-E-) - Method in class org.apache.commons.collections4.functors.[WhileClosure](http://docs.google.com/org/apache/commons/collections4/functors/WhileClosure.html)

Executes the closure until the predicate is false.

[executeAndThrow(E)](http://docs.google.com/org/apache/commons/collections4/functors/CatchAndRethrowClosure.html#executeAndThrow-E-) - Method in class org.apache.commons.collections4.functors.[CatchAndRethrowClosure](http://docs.google.com/org/apache/commons/collections4/functors/CatchAndRethrowClosure.html)

Execute this closure on the specified input object.

[exists(Iterable<C>, Predicate<? super C>)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#exists-java.lang.Iterable-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Deprecated.

since 4.1, use [IterableUtils.matchesAny(Iterable, Predicate)](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#matchesAny-java.lang.Iterable-org.apache.commons.collections4.Predicate-) instead

[expectedModCount](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedListIterator.html#expectedModCount) - Variable in class org.apache.commons.collections4.list.[AbstractLinkedList.LinkedListIterator](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedListIterator.html)

The modification count that the list is expected to have.

[expectedModCount](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkIterator.html#expectedModCount) - Variable in class org.apache.commons.collections4.map.[AbstractLinkedMap.LinkIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkIterator.html)

The modification count expected

[expirationTime(K, V)](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.ConstantTimeToLiveExpirationPolicy.html#expirationTime-K-V-) - Method in class org.apache.commons.collections4.map.[PassiveExpiringMap.ConstantTimeToLiveExpirationPolicy](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.ConstantTimeToLiveExpirationPolicy.html)

Determine the expiration time for the given key-value entry.

[expirationTime(K, V)](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.ExpirationPolicy.html#expirationTime-K-V-) - Method in interface org.apache.commons.collections4.map.[PassiveExpiringMap.ExpirationPolicy](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.ExpirationPolicy.html)

Determine the expiration time for the given key-value entry.

[extractSingleton(Collection<E>)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#extractSingleton-java.util.Collection-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Extract the lone element of the specified Collection.

## F

[Factory](http://docs.google.com/org/apache/commons/collections4/Factory.html)<[T](http://docs.google.com/org/apache/commons/collections4/Factory.html)> - Interface in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

Defines a functor interface implemented by classes that create objects.

[factory](http://docs.google.com/org/apache/commons/collections4/map/LazyMap.html#factory) - Variable in class org.apache.commons.collections4.map.[LazyMap](http://docs.google.com/org/apache/commons/collections4/map/LazyMap.html)

The factory to use to construct elements

[FactoryTransformer](http://docs.google.com/org/apache/commons/collections4/functors/FactoryTransformer.html)<[I](http://docs.google.com/org/apache/commons/collections4/functors/FactoryTransformer.html),[O](http://docs.google.com/org/apache/commons/collections4/functors/FactoryTransformer.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Transformer implementation that calls a Factory and returns the result.

[FactoryTransformer(Factory<? extends O>)](http://docs.google.com/org/apache/commons/collections4/functors/FactoryTransformer.html#FactoryTransformer-org.apache.commons.collections4.Factory-) - Constructor for class org.apache.commons.collections4.functors.[FactoryTransformer](http://docs.google.com/org/apache/commons/collections4/functors/FactoryTransformer.html)

Constructor that performs no validation.

[factoryTransformer(Factory<? extends O>)](http://docs.google.com/org/apache/commons/collections4/functors/FactoryTransformer.html#factoryTransformer-org.apache.commons.collections4.Factory-) - Static method in class org.apache.commons.collections4.functors.[FactoryTransformer](http://docs.google.com/org/apache/commons/collections4/functors/FactoryTransformer.html)

Factory method that performs validation.

[FactoryUtils](http://docs.google.com/org/apache/commons/collections4/FactoryUtils.html) - Class in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

FactoryUtils provides reference implementations and utilities for the Factory functor interface.

[FalsePredicate](http://docs.google.com/org/apache/commons/collections4/functors/FalsePredicate.html)<[T](http://docs.google.com/org/apache/commons/collections4/functors/FalsePredicate.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Predicate implementation that always returns false.

[falsePredicate()](http://docs.google.com/org/apache/commons/collections4/functors/FalsePredicate.html#falsePredicate--) - Static method in class org.apache.commons.collections4.functors.[FalsePredicate](http://docs.google.com/org/apache/commons/collections4/functors/FalsePredicate.html)

Get a typed instance.

[falsePredicate()](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html#falsePredicate--) - Static method in class org.apache.commons.collections4.[PredicateUtils](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html)

Gets a Predicate that always returns false.

[filter(Iterable<T>, Predicate<? super T>)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#filter-java.lang.Iterable-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Filter the collection by applying a Predicate to each element.

[filter(Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html#filter-org.apache.commons.collections4.Predicate-) - Method in class org.apache.commons.collections4.[FluentIterable](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html)

Returns a new FluentIterable whose iterator will only return elements from this iterable matching the provided predicate.

[filteredIterable(Iterable<E>, Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#filteredIterable-java.lang.Iterable-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[IterableUtils](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html)

Returns a view of the given iterable that only contains elements matching the provided predicate.

[filteredIterator(Iterator<? extends E>, Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#filteredIterator-java.util.Iterator-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets an iterator that filters another iterator.

[filteredListIterator(ListIterator<? extends E>, Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#filteredListIterator-java.util.ListIterator-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets a list iterator that filters another list iterator.

[filterInverse(Iterable<T>, Predicate<? super T>)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#filterInverse-java.lang.Iterable-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Filter the collection by applying a Predicate to each element.

[FilterIterator](http://docs.google.com/org/apache/commons/collections4/iterators/FilterIterator.html)<[E](http://docs.google.com/org/apache/commons/collections4/iterators/FilterIterator.html)> - Class in [org.apache.commons.collections4.iterators](http://docs.google.com/org/apache/commons/collections4/iterators/package-summary.html)

Decorates another [Iterator](https://docs.oracle.com/javase/7/docs/api/java/util/Iterator.html?is-external=true) using a predicate to filter elements.

[FilterIterator()](http://docs.google.com/org/apache/commons/collections4/iterators/FilterIterator.html#FilterIterator--) - Constructor for class org.apache.commons.collections4.iterators.[FilterIterator](http://docs.google.com/org/apache/commons/collections4/iterators/FilterIterator.html)

Constructs a new FilterIterator that will not function until [setIterator](http://docs.google.com/org/apache/commons/collections4/iterators/FilterIterator.html#setIterator-java.util.Iterator-) is invoked.

[FilterIterator(Iterator<? extends E>)](http://docs.google.com/org/apache/commons/collections4/iterators/FilterIterator.html#FilterIterator-java.util.Iterator-) - Constructor for class org.apache.commons.collections4.iterators.[FilterIterator](http://docs.google.com/org/apache/commons/collections4/iterators/FilterIterator.html)

Constructs a new FilterIterator that will not function until [setPredicate](http://docs.google.com/org/apache/commons/collections4/iterators/FilterIterator.html#setPredicate-org.apache.commons.collections4.Predicate-) is invoked.

[FilterIterator(Iterator<? extends E>, Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/iterators/FilterIterator.html#FilterIterator-java.util.Iterator-org.apache.commons.collections4.Predicate-) - Constructor for class org.apache.commons.collections4.iterators.[FilterIterator](http://docs.google.com/org/apache/commons/collections4/iterators/FilterIterator.html)

Constructs a new FilterIterator that will use the given iterator and predicate.

[FilterListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/FilterListIterator.html)<[E](http://docs.google.com/org/apache/commons/collections4/iterators/FilterListIterator.html)> - Class in [org.apache.commons.collections4.iterators](http://docs.google.com/org/apache/commons/collections4/iterators/package-summary.html)

Decorates another [ListIterator](https://docs.oracle.com/javase/7/docs/api/java/util/ListIterator.html?is-external=true) using a predicate to filter elements.

[FilterListIterator()](http://docs.google.com/org/apache/commons/collections4/iterators/FilterListIterator.html#FilterListIterator--) - Constructor for class org.apache.commons.collections4.iterators.[FilterListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/FilterListIterator.html)

Constructs a new FilterListIterator that will not function until [setListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/FilterListIterator.html#setListIterator-java.util.ListIterator-) and [setPredicate](http://docs.google.com/org/apache/commons/collections4/iterators/FilterListIterator.html#setPredicate-org.apache.commons.collections4.Predicate-) are invoked.

[FilterListIterator(ListIterator<? extends E>)](http://docs.google.com/org/apache/commons/collections4/iterators/FilterListIterator.html#FilterListIterator-java.util.ListIterator-) - Constructor for class org.apache.commons.collections4.iterators.[FilterListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/FilterListIterator.html)

Constructs a new FilterListIterator that will not function until [setPredicate](http://docs.google.com/org/apache/commons/collections4/iterators/FilterListIterator.html#setPredicate-org.apache.commons.collections4.Predicate-) is invoked.

[FilterListIterator(ListIterator<? extends E>, Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/iterators/FilterListIterator.html#FilterListIterator-java.util.ListIterator-org.apache.commons.collections4.Predicate-) - Constructor for class org.apache.commons.collections4.iterators.[FilterListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/FilterListIterator.html)

Constructs a new FilterListIterator.

[FilterListIterator(Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/iterators/FilterListIterator.html#FilterListIterator-org.apache.commons.collections4.Predicate-) - Constructor for class org.apache.commons.collections4.iterators.[FilterListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/FilterListIterator.html)

Constructs a new FilterListIterator that will not function until [setListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/FilterListIterator.html#setListIterator-java.util.ListIterator-) is invoked.

[find(Iterable<T>, Predicate<? super T>)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#find-java.lang.Iterable-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Deprecated.

since 4.1, use [IterableUtils.find(Iterable, Predicate)](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#find-java.lang.Iterable-org.apache.commons.collections4.Predicate-) instead

[find(Iterable<E>, Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#find-java.lang.Iterable-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[IterableUtils](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html)

Finds the first element in the given iterable which matches the given predicate.

[find(Iterator<E>, Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#find-java.util.Iterator-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Finds the first element in the given iterator which matches the given predicate.

[findNext(E)](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectGraphIterator.html#findNext-E-) - Method in class org.apache.commons.collections4.iterators.[ObjectGraphIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectGraphIterator.html)

Finds the next object in the iteration given any start object.

[findNextByIterator(Iterator<? extends E>)](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectGraphIterator.html#findNextByIterator-java.util.Iterator-) - Method in class org.apache.commons.collections4.iterators.[ObjectGraphIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectGraphIterator.html)

Finds the next object in the iteration given an iterator.

[first()](http://docs.google.com/org/apache/commons/collections4/bag/AbstractSortedBagDecorator.html#first--) - Method in class org.apache.commons.collections4.bag.[AbstractSortedBagDecorator](http://docs.google.com/org/apache/commons/collections4/bag/AbstractSortedBagDecorator.html)   [first()](http://docs.google.com/org/apache/commons/collections4/bag/PredicatedSortedBag.html#first--) - Method in class org.apache.commons.collections4.bag.[PredicatedSortedBag](http://docs.google.com/org/apache/commons/collections4/bag/PredicatedSortedBag.html)   [first()](http://docs.google.com/org/apache/commons/collections4/bag/SynchronizedSortedBag.html#first--) - Method in class org.apache.commons.collections4.bag.[SynchronizedSortedBag](http://docs.google.com/org/apache/commons/collections4/bag/SynchronizedSortedBag.html)   [first()](http://docs.google.com/org/apache/commons/collections4/bag/TransformedSortedBag.html#first--) - Method in class org.apache.commons.collections4.bag.[TransformedSortedBag](http://docs.google.com/org/apache/commons/collections4/bag/TransformedSortedBag.html)   [first()](http://docs.google.com/org/apache/commons/collections4/bag/TreeBag.html#first--) - Method in class org.apache.commons.collections4.bag.[TreeBag](http://docs.google.com/org/apache/commons/collections4/bag/TreeBag.html)   [first(Iterable<T>)](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#first-java.lang.Iterable-) - Static method in class org.apache.commons.collections4.[IterableUtils](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html)

Shortcut for get(iterator, 0).

[first(Iterator<E>)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#first-java.util.Iterator-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Shortcut for get(iterator, 0).

[first()](http://docs.google.com/org/apache/commons/collections4/set/AbstractSortedSetDecorator.html#first--) - Method in class org.apache.commons.collections4.set.[AbstractSortedSetDecorator](http://docs.google.com/org/apache/commons/collections4/set/AbstractSortedSetDecorator.html)   [first()](http://docs.google.com/org/apache/commons/collections4/set/PredicatedSortedSet.html#first--) - Method in class org.apache.commons.collections4.set.[PredicatedSortedSet](http://docs.google.com/org/apache/commons/collections4/set/PredicatedSortedSet.html)   [first()](http://docs.google.com/org/apache/commons/collections4/set/TransformedSortedSet.html#first--) - Method in class org.apache.commons.collections4.set.[TransformedSortedSet](http://docs.google.com/org/apache/commons/collections4/set/TransformedSortedSet.html)   [first()](http://docs.google.com/org/apache/commons/collections4/SortedBag.html#first--) - Method in interface org.apache.commons.collections4.[SortedBag](http://docs.google.com/org/apache/commons/collections4/SortedBag.html)

Returns the first (lowest) member.

[firstKey()](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractOrderedBidiMapDecorator.html#firstKey--) - Method in class org.apache.commons.collections4.bidimap.[AbstractOrderedBidiMapDecorator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractOrderedBidiMapDecorator.html)   [firstKey()](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.html#firstKey--) - Method in class org.apache.commons.collections4.bidimap.[DualTreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.html)   [firstKey()](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html#firstKey--) - Method in class org.apache.commons.collections4.bidimap.[TreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html)

Gets the first (lowest) key currently in this map.

[firstKey()](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html#firstKey--) - Method in class org.apache.commons.collections4.map.[AbstractLinkedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html)

Gets the first key in the map, which is the first inserted.

[firstKey()](http://docs.google.com/org/apache/commons/collections4/map/AbstractOrderedMapDecorator.html#firstKey--) - Method in class org.apache.commons.collections4.map.[AbstractOrderedMapDecorator](http://docs.google.com/org/apache/commons/collections4/map/AbstractOrderedMapDecorator.html)   [firstKey()](http://docs.google.com/org/apache/commons/collections4/map/AbstractSortedMapDecorator.html#firstKey--) - Method in class org.apache.commons.collections4.map.[AbstractSortedMapDecorator](http://docs.google.com/org/apache/commons/collections4/map/AbstractSortedMapDecorator.html)   [firstKey()](http://docs.google.com/org/apache/commons/collections4/map/LazySortedMap.html#firstKey--) - Method in class org.apache.commons.collections4.map.[LazySortedMap](http://docs.google.com/org/apache/commons/collections4/map/LazySortedMap.html)   [firstKey()](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html#firstKey--) - Method in class org.apache.commons.collections4.map.[ListOrderedMap](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html)

Gets the first key in this map by insert order.

[firstKey()](http://docs.google.com/org/apache/commons/collections4/map/PredicatedSortedMap.html#firstKey--) - Method in class org.apache.commons.collections4.map.[PredicatedSortedMap](http://docs.google.com/org/apache/commons/collections4/map/PredicatedSortedMap.html)   [firstKey()](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html#firstKey--) - Method in class org.apache.commons.collections4.map.[SingletonMap](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html)

Gets the first (and only) key in the map.

[firstKey()](http://docs.google.com/org/apache/commons/collections4/map/TransformedSortedMap.html#firstKey--) - Method in class org.apache.commons.collections4.map.[TransformedSortedMap](http://docs.google.com/org/apache/commons/collections4/map/TransformedSortedMap.html)   [firstKey()](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableSortedMap.html#firstKey--) - Method in class org.apache.commons.collections4.map.[UnmodifiableSortedMap](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableSortedMap.html)   [firstKey()](http://docs.google.com/org/apache/commons/collections4/OrderedMap.html#firstKey--) - Method in interface org.apache.commons.collections4.[OrderedMap](http://docs.google.com/org/apache/commons/collections4/OrderedMap.html)

Gets the first key currently in this map.

[firstKey()](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html#firstKey--) - Method in class org.apache.commons.collections4.trie.[UnmodifiableTrie](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html)   [FixedOrderComparator](http://docs.google.com/org/apache/commons/collections4/comparators/FixedOrderComparator.html)<[T](http://docs.google.com/org/apache/commons/collections4/comparators/FixedOrderComparator.html)> - Class in [org.apache.commons.collections4.comparators](http://docs.google.com/org/apache/commons/collections4/comparators/package-summary.html)

A Comparator which imposes a specific order on a specific set of Objects.

[FixedOrderComparator()](http://docs.google.com/org/apache/commons/collections4/comparators/FixedOrderComparator.html#FixedOrderComparator--) - Constructor for class org.apache.commons.collections4.comparators.[FixedOrderComparator](http://docs.google.com/org/apache/commons/collections4/comparators/FixedOrderComparator.html)

Constructs an empty FixedOrderComparator.

[FixedOrderComparator(T...)](http://docs.google.com/org/apache/commons/collections4/comparators/FixedOrderComparator.html#FixedOrderComparator-T...-) - Constructor for class org.apache.commons.collections4.comparators.[FixedOrderComparator](http://docs.google.com/org/apache/commons/collections4/comparators/FixedOrderComparator.html)

Constructs a FixedOrderComparator which uses the order of the given array to compare the objects.

[FixedOrderComparator(List<T>)](http://docs.google.com/org/apache/commons/collections4/comparators/FixedOrderComparator.html#FixedOrderComparator-java.util.List-) - Constructor for class org.apache.commons.collections4.comparators.[FixedOrderComparator](http://docs.google.com/org/apache/commons/collections4/comparators/FixedOrderComparator.html)

Constructs a FixedOrderComparator which uses the order of the given list to compare the objects.

[FixedOrderComparator.UnknownObjectBehavior](http://docs.google.com/org/apache/commons/collections4/comparators/FixedOrderComparator.UnknownObjectBehavior.html) - Enum in [org.apache.commons.collections4.comparators](http://docs.google.com/org/apache/commons/collections4/comparators/package-summary.html)

Unknown object behavior enum.

[FixedSizeList](http://docs.google.com/org/apache/commons/collections4/list/FixedSizeList.html)<[E](http://docs.google.com/org/apache/commons/collections4/list/FixedSizeList.html)> - Class in [org.apache.commons.collections4.list](http://docs.google.com/org/apache/commons/collections4/list/package-summary.html)

Decorates another List to fix the size preventing add/remove.

[FixedSizeList(List<E>)](http://docs.google.com/org/apache/commons/collections4/list/FixedSizeList.html#FixedSizeList-java.util.List-) - Constructor for class org.apache.commons.collections4.list.[FixedSizeList](http://docs.google.com/org/apache/commons/collections4/list/FixedSizeList.html)

Constructor that wraps (not copies).

[fixedSizeList(List<E>)](http://docs.google.com/org/apache/commons/collections4/list/FixedSizeList.html#fixedSizeList-java.util.List-) - Static method in class org.apache.commons.collections4.list.[FixedSizeList](http://docs.google.com/org/apache/commons/collections4/list/FixedSizeList.html)

Factory method to create a fixed size list.

[fixedSizeList(List<E>)](http://docs.google.com/org/apache/commons/collections4/ListUtils.html#fixedSizeList-java.util.List-) - Static method in class org.apache.commons.collections4.[ListUtils](http://docs.google.com/org/apache/commons/collections4/ListUtils.html)

Returns a fixed-sized list backed by the given list.

[FixedSizeMap](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeMap.html),[V](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeMap.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

Decorates another Map to fix the size, preventing add/remove.

[FixedSizeMap(Map<K, V>)](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeMap.html#FixedSizeMap-java.util.Map-) - Constructor for class org.apache.commons.collections4.map.[FixedSizeMap](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeMap.html)

Constructor that wraps (not copies).

[fixedSizeMap(Map<K, V>)](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeMap.html#fixedSizeMap-java.util.Map-) - Static method in class org.apache.commons.collections4.map.[FixedSizeMap](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeMap.html)

Factory method to create a fixed size map.

[fixedSizeMap(Map<K, V>)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#fixedSizeMap-java.util.Map-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Returns a fixed-sized map backed by the given map.

[FixedSizeSortedMap](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeSortedMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeSortedMap.html),[V](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeSortedMap.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

Decorates another SortedMap to fix the size blocking add/remove.

[FixedSizeSortedMap(SortedMap<K, V>)](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeSortedMap.html#FixedSizeSortedMap-java.util.SortedMap-) - Constructor for class org.apache.commons.collections4.map.[FixedSizeSortedMap](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeSortedMap.html)

Constructor that wraps (not copies).

[fixedSizeSortedMap(SortedMap<K, V>)](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeSortedMap.html#fixedSizeSortedMap-java.util.SortedMap-) - Static method in class org.apache.commons.collections4.map.[FixedSizeSortedMap](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeSortedMap.html)

Factory method to create a fixed size sorted map.

[fixedSizeSortedMap(SortedMap<K, V>)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#fixedSizeSortedMap-java.util.SortedMap-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Returns a fixed-sized sorted map backed by the given sorted map.

[Flat3Map](http://docs.google.com/org/apache/commons/collections4/map/Flat3Map.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/Flat3Map.html),[V](http://docs.google.com/org/apache/commons/collections4/map/Flat3Map.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

A Map implementation that stores data in simple fields until the size is greater than 3.

[Flat3Map()](http://docs.google.com/org/apache/commons/collections4/map/Flat3Map.html#Flat3Map--) - Constructor for class org.apache.commons.collections4.map.[Flat3Map](http://docs.google.com/org/apache/commons/collections4/map/Flat3Map.html)

Constructor.

[Flat3Map(Map<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/Flat3Map.html#Flat3Map-java.util.Map-) - Constructor for class org.apache.commons.collections4.map.[Flat3Map](http://docs.google.com/org/apache/commons/collections4/map/Flat3Map.html)

Constructor copying elements from another map.

[floor(E)](http://docs.google.com/org/apache/commons/collections4/set/AbstractNavigableSetDecorator.html#floor-E-) - Method in class org.apache.commons.collections4.set.[AbstractNavigableSetDecorator](http://docs.google.com/org/apache/commons/collections4/set/AbstractNavigableSetDecorator.html)   [floor(E)](http://docs.google.com/org/apache/commons/collections4/set/PredicatedNavigableSet.html#floor-E-) - Method in class org.apache.commons.collections4.set.[PredicatedNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/PredicatedNavigableSet.html)   [floor(E)](http://docs.google.com/org/apache/commons/collections4/set/TransformedNavigableSet.html#floor-E-) - Method in class org.apache.commons.collections4.set.[TransformedNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/TransformedNavigableSet.html)   [FluentIterable](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html)<[E](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html)> - Class in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

A FluentIterable provides a powerful yet simple API for manipulating Iterable instances in a fluent manner.

[forAllButLastDo(Iterable<T>, C)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#forAllButLastDo-java.lang.Iterable-C-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Deprecated.

since 4.1, use [IterableUtils.forEachButLast(Iterable, Closure)](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#forEachButLast-java.lang.Iterable-org.apache.commons.collections4.Closure-) instead

[forAllButLastDo(Iterator<T>, C)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#forAllButLastDo-java.util.Iterator-C-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Deprecated.

since 4.1, use [IteratorUtils.forEachButLast(Iterator, Closure)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#forEachButLast-java.util.Iterator-org.apache.commons.collections4.Closure-) instead

[forAllDo(Iterable<T>, C)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#forAllDo-java.lang.Iterable-C-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Deprecated.

since 4.1, use [IterableUtils.forEach(Iterable, Closure)](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#forEach-java.lang.Iterable-org.apache.commons.collections4.Closure-) instead

[forAllDo(Iterator<T>, C)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#forAllDo-java.util.Iterator-C-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Deprecated.

since 4.1, use [IteratorUtils.forEach(Iterator, Closure)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#forEach-java.util.Iterator-org.apache.commons.collections4.Closure-) instead

[forClosure(int, Closure<? super E>)](http://docs.google.com/org/apache/commons/collections4/ClosureUtils.html#forClosure-int-org.apache.commons.collections4.Closure-) - Static method in class org.apache.commons.collections4.[ClosureUtils](http://docs.google.com/org/apache/commons/collections4/ClosureUtils.html)

Creates a Closure that will call the closure count times.

[ForClosure](http://docs.google.com/org/apache/commons/collections4/functors/ForClosure.html)<[E](http://docs.google.com/org/apache/commons/collections4/functors/ForClosure.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Closure implementation that calls another closure n times, like a for loop.

[ForClosure(int, Closure<? super E>)](http://docs.google.com/org/apache/commons/collections4/functors/ForClosure.html#ForClosure-int-org.apache.commons.collections4.Closure-) - Constructor for class org.apache.commons.collections4.functors.[ForClosure](http://docs.google.com/org/apache/commons/collections4/functors/ForClosure.html)

Constructor that performs no validation.

[forClosure(int, Closure<? super E>)](http://docs.google.com/org/apache/commons/collections4/functors/ForClosure.html#forClosure-int-org.apache.commons.collections4.Closure-) - Static method in class org.apache.commons.collections4.functors.[ForClosure](http://docs.google.com/org/apache/commons/collections4/functors/ForClosure.html)

Factory method that performs validation.

[forEach(Closure<? super E>)](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html#forEach-org.apache.commons.collections4.Closure-) - Method in class org.apache.commons.collections4.[FluentIterable](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html)

Applies the closure to all elements contained in this iterable.

[forEach(Iterable<E>, Closure<? super E>)](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#forEach-java.lang.Iterable-org.apache.commons.collections4.Closure-) - Static method in class org.apache.commons.collections4.[IterableUtils](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html)

Applies the closure to each element of the provided iterable.

[forEach(Iterator<E>, Closure<? super E>)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#forEach-java.util.Iterator-org.apache.commons.collections4.Closure-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Applies the closure to each element of the provided iterator.

[forEachButLast(Iterable<E>, Closure<? super E>)](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#forEachButLast-java.lang.Iterable-org.apache.commons.collections4.Closure-) - Static method in class org.apache.commons.collections4.[IterableUtils](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html)

Executes the given closure on each but the last element in the iterable.

[forEachButLast(Iterator<E>, Closure<? super E>)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#forEachButLast-java.util.Iterator-org.apache.commons.collections4.Closure-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Executes the given closure on each but the last element in the iterator.

[frequency(Iterable<E>, T)](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#frequency-java.lang.Iterable-T-) - Static method in class org.apache.commons.collections4.[IterableUtils](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html)

Returns the number of occurrences of the provided object in the iterable.

[FunctorException](http://docs.google.com/org/apache/commons/collections4/FunctorException.html) - Exception in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

Runtime exception thrown from functors.

[FunctorException()](http://docs.google.com/org/apache/commons/collections4/FunctorException.html#FunctorException--) - Constructor for exception org.apache.commons.collections4.[FunctorException](http://docs.google.com/org/apache/commons/collections4/FunctorException.html)

Constructs a new FunctorException without specified detail message.

[FunctorException(String)](http://docs.google.com/org/apache/commons/collections4/FunctorException.html#FunctorException-java.lang.String-) - Constructor for exception org.apache.commons.collections4.[FunctorException](http://docs.google.com/org/apache/commons/collections4/FunctorException.html)

Constructs a new FunctorException with specified detail message.

[FunctorException(Throwable)](http://docs.google.com/org/apache/commons/collections4/FunctorException.html#FunctorException-java.lang.Throwable-) - Constructor for exception org.apache.commons.collections4.[FunctorException](http://docs.google.com/org/apache/commons/collections4/FunctorException.html)

Constructs a new FunctorException with specified nested Throwable root cause.

[FunctorException(String, Throwable)](http://docs.google.com/org/apache/commons/collections4/FunctorException.html#FunctorException-java.lang.String-java.lang.Throwable-) - Constructor for exception org.apache.commons.collections4.[FunctorException](http://docs.google.com/org/apache/commons/collections4/FunctorException.html)

Constructs a new FunctorException with specified detail message and nested Throwable root cause.

## G

[get(Object)](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html#get-java.lang.Object-) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html)   [get(Object)](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html#get-java.lang.Object-) - Method in class org.apache.commons.collections4.bidimap.[TreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html)

Gets the value to which this map maps the specified key.

[get(K)](http://docs.google.com/org/apache/commons/collections4/collection/IndexedCollection.html#get-K-) - Method in class org.apache.commons.collections4.collection.[IndexedCollection](http://docs.google.com/org/apache/commons/collections4/collection/IndexedCollection.html)

Get the element associated with the given key.

[get(Iterator<T>, int)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#get-java.util.Iterator-int-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Deprecated.

since 4.1, use IteratorUtils.get(Iterator, int) instead

[get(Iterable<T>, int)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#get-java.lang.Iterable-int-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Deprecated.

since 4.1, use IterableUtils.get(Iterable, int) instead

[get(Object, int)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#get-java.lang.Object-int-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Returns the index-th value in object, throwing IndexOutOfBoundsException if there is no such element or IllegalArgumentException if object is not an instance of one of the supported types.

[get(Map<K, V>, int)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#get-java.util.Map-int-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Returns the index-th Map.Entry in the map's entrySet, throwing IndexOutOfBoundsException if there is no such element.

[get(Enumeration<T>, int)](http://docs.google.com/org/apache/commons/collections4/EnumerationUtils.html#get-java.util.Enumeration-int-) - Static method in class org.apache.commons.collections4.[EnumerationUtils](http://docs.google.com/org/apache/commons/collections4/EnumerationUtils.html)

Returns the index-th value in the [Enumeration](https://docs.oracle.com/javase/7/docs/api/java/util/Enumeration.html?is-external=true), throwing IndexOutOfBoundsException if there is no such element.

[get(int)](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html#get-int-) - Method in class org.apache.commons.collections4.[FluentIterable](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html)

Returns the element at the provided position in this iterable.

[Get](http://docs.google.com/org/apache/commons/collections4/Get.html)<[K](http://docs.google.com/org/apache/commons/collections4/Get.html),[V](http://docs.google.com/org/apache/commons/collections4/Get.html)> - Interface in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

The "read" subset of the [Map](https://docs.oracle.com/javase/7/docs/api/java/util/Map.html?is-external=true) interface.

[get(Object)](http://docs.google.com/org/apache/commons/collections4/Get.html#get-java.lang.Object-) - Method in interface org.apache.commons.collections4.[Get](http://docs.google.com/org/apache/commons/collections4/Get.html)   [get(Iterable<T>, int)](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#get-java.lang.Iterable-int-) - Static method in class org.apache.commons.collections4.[IterableUtils](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html)

Returns the index-th value in the iterable's [Iterator](https://docs.oracle.com/javase/7/docs/api/java/util/Iterator.html?is-external=true), throwing IndexOutOfBoundsException if there is no such element.

[get(Iterator<E>, int)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#get-java.util.Iterator-int-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Returns the index-th value in [Iterator](https://docs.oracle.com/javase/7/docs/api/java/util/Iterator.html?is-external=true), throwing IndexOutOfBoundsException if there is no such element.

[get(int)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#get-int-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)   [get(int)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedSubList.html#get-int-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList.LinkedSubList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedSubList.html)   [get(int)](http://docs.google.com/org/apache/commons/collections4/list/AbstractListDecorator.html#get-int-) - Method in class org.apache.commons.collections4.list.[AbstractListDecorator](http://docs.google.com/org/apache/commons/collections4/list/AbstractListDecorator.html)   [get(int)](http://docs.google.com/org/apache/commons/collections4/list/FixedSizeList.html#get-int-) - Method in class org.apache.commons.collections4.list.[FixedSizeList](http://docs.google.com/org/apache/commons/collections4/list/FixedSizeList.html)   [get(int)](http://docs.google.com/org/apache/commons/collections4/list/LazyList.html#get-int-) - Method in class org.apache.commons.collections4.list.[LazyList](http://docs.google.com/org/apache/commons/collections4/list/LazyList.html)

Decorate the get method to perform the lazy behaviour.

[get(int)](http://docs.google.com/org/apache/commons/collections4/list/PredicatedList.html#get-int-) - Method in class org.apache.commons.collections4.list.[PredicatedList](http://docs.google.com/org/apache/commons/collections4/list/PredicatedList.html)   [get(int)](http://docs.google.com/org/apache/commons/collections4/list/TransformedList.html#get-int-) - Method in class org.apache.commons.collections4.list.[TransformedList](http://docs.google.com/org/apache/commons/collections4/list/TransformedList.html)   [get(int)](http://docs.google.com/org/apache/commons/collections4/list/TreeList.html#get-int-) - Method in class org.apache.commons.collections4.list.[TreeList](http://docs.google.com/org/apache/commons/collections4/list/TreeList.html)

Gets the element at the specified index.

[get(K)](http://docs.google.com/org/apache/commons/collections4/ListValuedMap.html#get-K-) - Method in interface org.apache.commons.collections4.[ListValuedMap](http://docs.google.com/org/apache/commons/collections4/ListValuedMap.html)

Gets the list of values associated with the specified key.

[get(Object)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#get-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Gets the value mapped to the key specified.

[get(Object)](http://docs.google.com/org/apache/commons/collections4/map/AbstractMapDecorator.html#get-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[AbstractMapDecorator](http://docs.google.com/org/apache/commons/collections4/map/AbstractMapDecorator.html)   [get(Object)](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html#get-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[AbstractReferenceMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html)

Gets the value mapped to the key specified.

[get(Object)](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html#get-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[CompositeMap](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html)

Returns the value to which this map maps the specified key.

[get(Object)](http://docs.google.com/org/apache/commons/collections4/map/DefaultedMap.html#get-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[DefaultedMap](http://docs.google.com/org/apache/commons/collections4/map/DefaultedMap.html)   [get(Object)](http://docs.google.com/org/apache/commons/collections4/map/Flat3Map.html#get-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[Flat3Map](http://docs.google.com/org/apache/commons/collections4/map/Flat3Map.html)

Gets the value mapped to the key specified.

[get(Object)](http://docs.google.com/org/apache/commons/collections4/map/LazyMap.html#get-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[LazyMap](http://docs.google.com/org/apache/commons/collections4/map/LazyMap.html)   [get(int)](http://docs.google.com/org/apache/commons/collections4/map/LinkedMap.html#get-int-) - Method in class org.apache.commons.collections4.map.[LinkedMap](http://docs.google.com/org/apache/commons/collections4/map/LinkedMap.html)

Gets the key at the specified index.

[get(int)](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html#get-int-) - Method in class org.apache.commons.collections4.map.[ListOrderedMap](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html)

Gets the key at the specified index.

[get(Object)](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html#get-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[LRUMap](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html)

Gets the value mapped to the key specified.

[get(Object, boolean)](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html#get-java.lang.Object-boolean-) - Method in class org.apache.commons.collections4.map.[LRUMap](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html)

Gets the value mapped to the key specified.

[get(Object, Object)](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html#get-java.lang.Object-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[MultiKeyMap](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html)

Gets the value mapped to the specified multi-key.

[get(Object, Object, Object)](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html#get-java.lang.Object-java.lang.Object-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[MultiKeyMap](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html)

Gets the value mapped to the specified multi-key.

[get(Object, Object, Object, Object)](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html#get-java.lang.Object-java.lang.Object-java.lang.Object-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[MultiKeyMap](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html)

Gets the value mapped to the specified multi-key.

[get(Object, Object, Object, Object, Object)](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html#get-java.lang.Object-java.lang.Object-java.lang.Object-java.lang.Object-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[MultiKeyMap](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html)

Gets the value mapped to the specified multi-key.

[get(Object)](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.html#get-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[PassiveExpiringMap](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.html)

All expired entries are removed from the map prior to returning the entry value.

[get(Object)](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html#get-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[SingletonMap](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html)

Gets the value mapped to the key specified.

[get(Object)](http://docs.google.com/org/apache/commons/collections4/map/StaticBucketMap.html#get-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[StaticBucketMap](http://docs.google.com/org/apache/commons/collections4/map/StaticBucketMap.html)

Gets the value associated with the key.

[get(K)](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractListValuedMap.html#get-K-) - Method in class org.apache.commons.collections4.multimap.[AbstractListValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractListValuedMap.html)

Gets the list of values associated with the specified key.

[get(K)](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html#get-K-) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html)

Gets the collection of values associated with the specified key.

[get(K)](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html#get-K-) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMapDecorator](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html)   [get(K)](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractSetValuedMap.html#get-K-) - Method in class org.apache.commons.collections4.multimap.[AbstractSetValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractSetValuedMap.html)

Gets the set of values associated with the specified key.

[get(Object)](http://docs.google.com/org/apache/commons/collections4/MultiMap.html#get-java.lang.Object-) - Method in interface org.apache.commons.collections4.[MultiMap](http://docs.google.com/org/apache/commons/collections4/MultiMap.html)

Deprecated.

Gets the collection of values associated with the specified key.

[get(K)](http://docs.google.com/org/apache/commons/collections4/multimap/UnmodifiableMultiValuedMap.html#get-K-) - Method in class org.apache.commons.collections4.multimap.[UnmodifiableMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/UnmodifiableMultiValuedMap.html)   [get(K)](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html#get-K-) - Method in interface org.apache.commons.collections4.[MultiValuedMap](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html)

Returns a view collection of the values associated with the specified key.

[get(int)](http://docs.google.com/org/apache/commons/collections4/queue/CircularFifoQueue.html#get-int-) - Method in class org.apache.commons.collections4.queue.[CircularFifoQueue](http://docs.google.com/org/apache/commons/collections4/queue/CircularFifoQueue.html)

Returns the element at the specified position in this queue.

[get(int)](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html#get-int-) - Method in class org.apache.commons.collections4.set.[ListOrderedSet](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html)

Returns the element at the specified position in this ordered set.

[get(K)](http://docs.google.com/org/apache/commons/collections4/SetValuedMap.html#get-K-) - Method in interface org.apache.commons.collections4.[SetValuedMap](http://docs.google.com/org/apache/commons/collections4/SetValuedMap.html)

Gets the set of values associated with the specified key.

[get(Object)](http://docs.google.com/org/apache/commons/collections4/splitmap/AbstractIterableGetMapDecorator.html#get-java.lang.Object-) - Method in class org.apache.commons.collections4.splitmap.[AbstractIterableGetMapDecorator](http://docs.google.com/org/apache/commons/collections4/splitmap/AbstractIterableGetMapDecorator.html)   [get(Object)](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html#get-java.lang.Object-) - Method in class org.apache.commons.collections4.trie.[UnmodifiableTrie](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html)   [getArray()](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayIterator.html#getArray--) - Method in class org.apache.commons.collections4.iterators.[ArrayIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayIterator.html)

Gets the array that this iterator is iterating over.

[getArray()](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayIterator.html#getArray--) - Method in class org.apache.commons.collections4.iterators.[ObjectArrayIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayIterator.html)

Gets the array that this iterator is iterating over.

[getBag()](http://docs.google.com/org/apache/commons/collections4/bag/SynchronizedBag.html#getBag--) - Method in class org.apache.commons.collections4.bag.[SynchronizedBag](http://docs.google.com/org/apache/commons/collections4/bag/SynchronizedBag.html)

Gets the bag being decorated.

[getBag()](http://docs.google.com/org/apache/commons/collections4/bag/TransformedBag.html#getBag--) - Method in class org.apache.commons.collections4.bag.[TransformedBag](http://docs.google.com/org/apache/commons/collections4/bag/TransformedBag.html)

Gets the decorated bag.

[getBoolean(Map<? super K, ?>, K)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#getBoolean-java.util.Map-K-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Gets a Boolean from a Map in a null-safe manner.

[getBoolean(Map<? super K, ?>, K, Boolean)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#getBoolean-java.util.Map-K-java.lang.Boolean-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Looks up the given key in the given map, converting the result into a boolean, using the default value if the conversion fails.

[getBooleanValue(Map<? super K, ?>, K)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#getBooleanValue-java.util.Map-K-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Gets a boolean from a Map in a null-safe manner.

[getBooleanValue(Map<? super K, ?>, K, boolean)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#getBooleanValue-java.util.Map-K-boolean-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Gets a boolean from a Map in a null-safe manner, using the default value if the conversion fails.

[getByte(Map<? super K, ?>, K)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#getByte-java.util.Map-K-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Gets a Byte from a Map in a null-safe manner.

[getByte(Map<? super K, ?>, K, Byte)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#getByte-java.util.Map-K-java.lang.Byte-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Looks up the given key in the given map, converting the result into a byte, using the default value if the conversion fails.

[getByteValue(Map<? super K, ?>, K)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#getByteValue-java.util.Map-K-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Gets a byte from a Map in a null-safe manner.

[getByteValue(Map<? super K, ?>, K, byte)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#getByteValue-java.util.Map-K-byte-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Gets a byte from a Map in a null-safe manner, using the default value if the conversion fails.

[getCardinalityMap(Iterable<? extends O>)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#getCardinalityMap-java.lang.Iterable-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Returns a [Map](https://docs.oracle.com/javase/7/docs/api/java/util/Map.html?is-external=true) mapping each unique element in the given [Collection](https://docs.oracle.com/javase/7/docs/api/java/util/Collection.html?is-external=true) to an [Integer](https://docs.oracle.com/javase/7/docs/api/java/lang/Integer.html?is-external=true) representing the number of occurrences of that element in the [Collection](https://docs.oracle.com/javase/7/docs/api/java/util/Collection.html?is-external=true).

[getClosure()](http://docs.google.com/org/apache/commons/collections4/functors/ClosureTransformer.html#getClosure--) - Method in class org.apache.commons.collections4.functors.[ClosureTransformer](http://docs.google.com/org/apache/commons/collections4/functors/ClosureTransformer.html)

Gets the closure.

[getClosure()](http://docs.google.com/org/apache/commons/collections4/functors/ForClosure.html#getClosure--) - Method in class org.apache.commons.collections4.functors.[ForClosure](http://docs.google.com/org/apache/commons/collections4/functors/ForClosure.html)

Gets the closure.

[getClosure()](http://docs.google.com/org/apache/commons/collections4/functors/WhileClosure.html#getClosure--) - Method in class org.apache.commons.collections4.functors.[WhileClosure](http://docs.google.com/org/apache/commons/collections4/functors/WhileClosure.html)

Gets the closure.

[getClosures()](http://docs.google.com/org/apache/commons/collections4/functors/ChainedClosure.html#getClosures--) - Method in class org.apache.commons.collections4.functors.[ChainedClosure](http://docs.google.com/org/apache/commons/collections4/functors/ChainedClosure.html)

Gets the closures.

[getClosures()](http://docs.google.com/org/apache/commons/collections4/functors/SwitchClosure.html#getClosures--) - Method in class org.apache.commons.collections4.functors.[SwitchClosure](http://docs.google.com/org/apache/commons/collections4/functors/SwitchClosure.html)

Gets the closures.

[getCollection(Object)](http://docs.google.com/org/apache/commons/collections4/map/MultiValueMap.html#getCollection-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[MultiValueMap](http://docs.google.com/org/apache/commons/collections4/map/MultiValueMap.html)

Deprecated.

Gets the collection mapped to the specified key.

[getCollection(MultiValuedMap<K, V>, K)](http://docs.google.com/org/apache/commons/collections4/MultiMapUtils.html#getCollection-org.apache.commons.collections4.MultiValuedMap-K-) - Static method in class org.apache.commons.collections4.[MultiMapUtils](http://docs.google.com/org/apache/commons/collections4/MultiMapUtils.html)

Gets a Collection from MultiValuedMap in a null-safe manner.

[getCollections()](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html#getCollections--) - Method in class org.apache.commons.collections4.collection.[CompositeCollection](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html)

Gets the collections being decorated.

[getComparator()](http://docs.google.com/org/apache/commons/collections4/iterators/CollatingIterator.html#getComparator--) - Method in class org.apache.commons.collections4.iterators.[CollatingIterator](http://docs.google.com/org/apache/commons/collections4/iterators/CollatingIterator.html)

Gets the [Comparator](https://docs.oracle.com/javase/7/docs/api/java/util/Comparator.html?is-external=true) by which collatation occurs.

[getConstant()](http://docs.google.com/org/apache/commons/collections4/functors/ConstantFactory.html#getConstant--) - Method in class org.apache.commons.collections4.functors.[ConstantFactory](http://docs.google.com/org/apache/commons/collections4/functors/ConstantFactory.html)

Gets the constant.

[getConstant()](http://docs.google.com/org/apache/commons/collections4/functors/ConstantTransformer.html#getConstant--) - Method in class org.apache.commons.collections4.functors.[ConstantTransformer](http://docs.google.com/org/apache/commons/collections4/functors/ConstantTransformer.html)

Gets the constant.

[getCount(Object)](http://docs.google.com/org/apache/commons/collections4/bag/AbstractBagDecorator.html#getCount-java.lang.Object-) - Method in class org.apache.commons.collections4.bag.[AbstractBagDecorator](http://docs.google.com/org/apache/commons/collections4/bag/AbstractBagDecorator.html)   [getCount(Object)](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html#getCount-java.lang.Object-) - Method in class org.apache.commons.collections4.bag.[AbstractMapBag](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html)

Returns the number of occurrence of the given element in this bag by looking up its count in the underlying map.

[getCount(Object)](http://docs.google.com/org/apache/commons/collections4/Bag.html#getCount-java.lang.Object-) - Method in interface org.apache.commons.collections4.[Bag](http://docs.google.com/org/apache/commons/collections4/Bag.html)

Returns the number of occurrences (cardinality) of the given object currently in the bag.

[getCount(Object)](http://docs.google.com/org/apache/commons/collections4/bag/PredicatedBag.html#getCount-java.lang.Object-) - Method in class org.apache.commons.collections4.bag.[PredicatedBag](http://docs.google.com/org/apache/commons/collections4/bag/PredicatedBag.html)   [getCount(Object)](http://docs.google.com/org/apache/commons/collections4/bag/SynchronizedBag.html#getCount-java.lang.Object-) - Method in class org.apache.commons.collections4.bag.[SynchronizedBag](http://docs.google.com/org/apache/commons/collections4/bag/SynchronizedBag.html)   [getCount(Object)](http://docs.google.com/org/apache/commons/collections4/bag/TransformedBag.html#getCount-java.lang.Object-) - Method in class org.apache.commons.collections4.bag.[TransformedBag](http://docs.google.com/org/apache/commons/collections4/bag/TransformedBag.html)   [getCount()](http://docs.google.com/org/apache/commons/collections4/functors/ForClosure.html#getCount--) - Method in class org.apache.commons.collections4.functors.[ForClosure](http://docs.google.com/org/apache/commons/collections4/functors/ForClosure.html)

Gets the count.

[getCount(Object)](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.html#getCount-java.lang.Object-) - Method in class org.apache.commons.collections4.multiset.[AbstractMapMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.html)

Returns the number of occurrence of the given element in this multiset by looking up its count in the underlying map.

[getCount()](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.MultiSetEntry.html#getCount--) - Method in class org.apache.commons.collections4.multiset.[AbstractMapMultiSet.MultiSetEntry](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.MultiSetEntry.html)   [getCount(Object)](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html#getCount-java.lang.Object-) - Method in class org.apache.commons.collections4.multiset.[AbstractMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html)

Returns the number of occurrence of the given element in this multiset by iterating over its entrySet.

[getCount(Object)](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSetDecorator.html#getCount-java.lang.Object-) - Method in class org.apache.commons.collections4.multiset.[AbstractMultiSetDecorator](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSetDecorator.html)   [getCount()](http://docs.google.com/org/apache/commons/collections4/MultiSet.Entry.html#getCount--) - Method in interface org.apache.commons.collections4.[MultiSet.Entry](http://docs.google.com/org/apache/commons/collections4/MultiSet.Entry.html)

Returns the number of occurrences for the element of this entry.

[getCount(Object)](http://docs.google.com/org/apache/commons/collections4/MultiSet.html#getCount-java.lang.Object-) - Method in interface org.apache.commons.collections4.[MultiSet](http://docs.google.com/org/apache/commons/collections4/MultiSet.html)

Returns the number of occurrences of the given object currently in the MultiSet.

[getCount(Object)](http://docs.google.com/org/apache/commons/collections4/multiset/PredicatedMultiSet.html#getCount-java.lang.Object-) - Method in class org.apache.commons.collections4.multiset.[PredicatedMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/PredicatedMultiSet.html)   [getCount(Object)](http://docs.google.com/org/apache/commons/collections4/multiset/SynchronizedMultiSet.html#getCount-java.lang.Object-) - Method in class org.apache.commons.collections4.multiset.[SynchronizedMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/SynchronizedMultiSet.html)   [getDefaultClosure()](http://docs.google.com/org/apache/commons/collections4/functors/SwitchClosure.html#getDefaultClosure--) - Method in class org.apache.commons.collections4.functors.[SwitchClosure](http://docs.google.com/org/apache/commons/collections4/functors/SwitchClosure.html)

Gets the default closure.

[getDefaultTransformer()](http://docs.google.com/org/apache/commons/collections4/functors/SwitchTransformer.html#getDefaultTransformer--) - Method in class org.apache.commons.collections4.functors.[SwitchTransformer](http://docs.google.com/org/apache/commons/collections4/functors/SwitchTransformer.html)

Gets the default transformer.

[getDouble(Map<? super K, ?>, K)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#getDouble-java.util.Map-K-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Gets a Double from a Map in a null-safe manner.

[getDouble(Map<? super K, ?>, K, Double)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#getDouble-java.util.Map-K-java.lang.Double-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Looks up the given key in the given map, converting the result into a double, using the default value if the conversion fails.

[getDoubleValue(Map<? super K, ?>, K)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#getDoubleValue-java.util.Map-K-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Gets a double from a Map in a null-safe manner.

[getDoubleValue(Map<? super K, ?>, K, double)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#getDoubleValue-java.util.Map-K-double-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Gets a double from a Map in a null-safe manner, using the default value if the conversion fails.

[getElement()](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.MultiSetEntry.html#getElement--) - Method in class org.apache.commons.collections4.multiset.[AbstractMapMultiSet.MultiSetEntry](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.MultiSetEntry.html)   [getElement()](http://docs.google.com/org/apache/commons/collections4/MultiSet.Entry.html#getElement--) - Method in interface org.apache.commons.collections4.[MultiSet.Entry](http://docs.google.com/org/apache/commons/collections4/MultiSet.Entry.html)

Returns the element corresponding to this entry.

[getEndIndex()](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayIterator.html#getEndIndex--) - Method in class org.apache.commons.collections4.iterators.[ArrayIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayIterator.html)

Gets the end index to loop to.

[getEndIndex()](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayIterator.html#getEndIndex--) - Method in class org.apache.commons.collections4.iterators.[ObjectArrayIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayIterator.html)

Gets the end index to loop to.

[getEntry(Object)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#getEntry-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Gets the entry mapped to the key specified.

[getEntry(Object)](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html#getEntry-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[AbstractLinkedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html)   [getEntry(int)](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html#getEntry-int-) - Method in class org.apache.commons.collections4.map.[AbstractLinkedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html)

Gets the key at the specified index.

[getEntry(Object)](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html#getEntry-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[AbstractReferenceMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html)

Gets the entry mapped to the key specified.

[getEnumeration()](http://docs.google.com/org/apache/commons/collections4/iterators/EnumerationIterator.html#getEnumeration--) - Method in class org.apache.commons.collections4.iterators.[EnumerationIterator](http://docs.google.com/org/apache/commons/collections4/iterators/EnumerationIterator.html)

Returns the underlying enumeration.

[getFactory()](http://docs.google.com/org/apache/commons/collections4/functors/FactoryTransformer.html#getFactory--) - Method in class org.apache.commons.collections4.functors.[FactoryTransformer](http://docs.google.com/org/apache/commons/collections4/functors/FactoryTransformer.html)

Gets the factory.

[getFalseClosure()](http://docs.google.com/org/apache/commons/collections4/functors/IfClosure.html#getFalseClosure--) - Method in class org.apache.commons.collections4.functors.[IfClosure](http://docs.google.com/org/apache/commons/collections4/functors/IfClosure.html)

Gets the closure called when false.

[getFalseFirstComparator()](http://docs.google.com/org/apache/commons/collections4/comparators/BooleanComparator.html#getFalseFirstComparator--) - Static method in class org.apache.commons.collections4.comparators.[BooleanComparator](http://docs.google.com/org/apache/commons/collections4/comparators/BooleanComparator.html)

Returns a BooleanComparator instance that sorts false values before true values.

[getFalseTransformer()](http://docs.google.com/org/apache/commons/collections4/functors/IfTransformer.html#getFalseTransformer--) - Method in class org.apache.commons.collections4.functors.[IfTransformer](http://docs.google.com/org/apache/commons/collections4/functors/IfTransformer.html)

Gets the transformer used when false.

[getFirst()](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#getFirst--) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)   [getFloat(Map<? super K, ?>, K)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#getFloat-java.util.Map-K-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Gets a Float from a Map in a null-safe manner.

[getFloat(Map<? super K, ?>, K, Float)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#getFloat-java.util.Map-K-java.lang.Float-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Looks up the given key in the given map, converting the result into a float, using the default value if the conversion fails.

[getFloatValue(Map<? super K, ?>, K)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#getFloatValue-java.util.Map-K-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Gets a float from a Map in a null-safe manner.

[getFloatValue(Map<? super K, ?>, K, float)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#getFloatValue-java.util.Map-K-float-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Gets a float from a Map in a null-safe manner, using the default value if the conversion fails.

[getInteger(Map<? super K, ?>, K)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#getInteger-java.util.Map-K-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Gets a Integer from a Map in a null-safe manner.

[getInteger(Map<? super K, ?>, K, Integer)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#getInteger-java.util.Map-K-java.lang.Integer-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Looks up the given key in the given map, converting the result into an integer, using the default value if the conversion fails.

[getIntValue(Map<? super K, ?>, K)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#getIntValue-java.util.Map-K-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Gets an int from a Map in a null-safe manner.

[getIntValue(Map<? super K, ?>, K, int)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#getIntValue-java.util.Map-K-int-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Gets an int from a Map in a null-safe manner, using the default value if the conversion fails.

[getIterator()](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractUntypedIteratorDecorator.html#getIterator--) - Method in class org.apache.commons.collections4.iterators.[AbstractUntypedIteratorDecorator](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractUntypedIteratorDecorator.html)

Gets the iterator being decorated.

[getIterator()](http://docs.google.com/org/apache/commons/collections4/iterators/FilterIterator.html#getIterator--) - Method in class org.apache.commons.collections4.iterators.[FilterIterator](http://docs.google.com/org/apache/commons/collections4/iterators/FilterIterator.html)

Gets the iterator this iterator is using.

[getIterator()](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorEnumeration.html#getIterator--) - Method in class org.apache.commons.collections4.iterators.[IteratorEnumeration](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorEnumeration.html)

Returns the underlying iterator.

[getIterator()](http://docs.google.com/org/apache/commons/collections4/iterators/TransformIterator.html#getIterator--) - Method in class org.apache.commons.collections4.iterators.[TransformIterator](http://docs.google.com/org/apache/commons/collections4/iterators/TransformIterator.html)

Gets the iterator this iterator is using.

[getIterator(Object)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#getIterator-java.lang.Object-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets a suitable Iterator for the given object.

[getIteratorIndex()](http://docs.google.com/org/apache/commons/collections4/iterators/CollatingIterator.html#getIteratorIndex--) - Method in class org.apache.commons.collections4.iterators.[CollatingIterator](http://docs.google.com/org/apache/commons/collections4/iterators/CollatingIterator.html)

Returns the index of the iterator that returned the last element.

[getIterators()](http://docs.google.com/org/apache/commons/collections4/iterators/CollatingIterator.html#getIterators--) - Method in class org.apache.commons.collections4.iterators.[CollatingIterator](http://docs.google.com/org/apache/commons/collections4/iterators/CollatingIterator.html)

Gets the list of Iterators (unmodifiable).

[getKey(Object)](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractBidiMapDecorator.html#getKey-java.lang.Object-) - Method in class org.apache.commons.collections4.bidimap.[AbstractBidiMapDecorator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractBidiMapDecorator.html)   [getKey()](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.BidiMapIterator.html#getKey--) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.BidiMapIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.BidiMapIterator.html)   [getKey(Object)](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html#getKey-java.lang.Object-) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html)   [getKey()](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.BidiOrderedMapIterator.html#getKey--) - Method in class org.apache.commons.collections4.bidimap.[DualTreeBidiMap.BidiOrderedMapIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.BidiOrderedMapIterator.html)   [getKey(Object)](http://docs.google.com/org/apache/commons/collections4/BidiMap.html#getKey-java.lang.Object-) - Method in interface org.apache.commons.collections4.[BidiMap](http://docs.google.com/org/apache/commons/collections4/BidiMap.html)

Gets the key that is currently mapped to the specified value.

[getKey(Object)](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html#getKey-java.lang.Object-) - Method in class org.apache.commons.collections4.bidimap.[TreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html)

Returns the key to which this map maps the specified value.

[getKey()](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractEmptyMapIterator.html#getKey--) - Method in class org.apache.commons.collections4.iterators.[AbstractEmptyMapIterator](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractEmptyMapIterator.html)   [getKey()](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractMapIteratorDecorator.html#getKey--) - Method in class org.apache.commons.collections4.iterators.[AbstractMapIteratorDecorator](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractMapIteratorDecorator.html)

Gets the current key, which is the key returned by the last call to next().

[getKey()](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractOrderedMapIteratorDecorator.html#getKey--) - Method in class org.apache.commons.collections4.iterators.[AbstractOrderedMapIteratorDecorator](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractOrderedMapIteratorDecorator.html)

Gets the current key, which is the key returned by the last call to next().

[getKey()](http://docs.google.com/org/apache/commons/collections4/iterators/EntrySetMapIterator.html#getKey--) - Method in class org.apache.commons.collections4.iterators.[EntrySetMapIterator](http://docs.google.com/org/apache/commons/collections4/iterators/EntrySetMapIterator.html)

Gets the current key, which is the key returned by the last call to next().

[getKey()](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableMapIterator.html#getKey--) - Method in class org.apache.commons.collections4.iterators.[UnmodifiableMapIterator](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableMapIterator.html)   [getKey()](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableOrderedMapIterator.html#getKey--) - Method in class org.apache.commons.collections4.iterators.[UnmodifiableOrderedMapIterator](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableOrderedMapIterator.html)   [getKey()](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractKeyValue.html#getKey--) - Method in class org.apache.commons.collections4.keyvalue.[AbstractKeyValue](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractKeyValue.html)

Gets the key from the pair.

[getKey()](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractMapEntryDecorator.html#getKey--) - Method in class org.apache.commons.collections4.keyvalue.[AbstractMapEntryDecorator](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractMapEntryDecorator.html)   [getKey()](http://docs.google.com/org/apache/commons/collections4/KeyValue.html#getKey--) - Method in interface org.apache.commons.collections4.[KeyValue](http://docs.google.com/org/apache/commons/collections4/KeyValue.html)

Gets the key from the pair.

[getKey(int)](http://docs.google.com/org/apache/commons/collections4/keyvalue/MultiKey.html#getKey-int-) - Method in class org.apache.commons.collections4.keyvalue.[MultiKey](http://docs.google.com/org/apache/commons/collections4/keyvalue/MultiKey.html)

Gets the key at the specified index.

[getKey()](http://docs.google.com/org/apache/commons/collections4/keyvalue/TiedMapEntry.html#getKey--) - Method in class org.apache.commons.collections4.keyvalue.[TiedMapEntry](http://docs.google.com/org/apache/commons/collections4/keyvalue/TiedMapEntry.html)

Gets the key of this entry

[getKey()](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html#getKey--) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap.HashEntry](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html)   [getKey()](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashMapIterator.html#getKey--) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap.HashMapIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashMapIterator.html)   [getKey()](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkMapIterator.html#getKey--) - Method in class org.apache.commons.collections4.map.[AbstractLinkedMap.LinkMapIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkMapIterator.html)   [getKey()](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html#getKey--) - Method in class org.apache.commons.collections4.map.[AbstractReferenceMap.ReferenceEntry](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html)

Gets the key from the entry.

[getKey()](http://docs.google.com/org/apache/commons/collections4/map/EntrySetToMapIteratorAdapter.html#getKey--) - Method in class org.apache.commons.collections4.map.[EntrySetToMapIteratorAdapter](http://docs.google.com/org/apache/commons/collections4/map/EntrySetToMapIteratorAdapter.html)

Gets the current key, which is the key returned by the last call to next().

[getKey()](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html#getKey--) - Method in class org.apache.commons.collections4.map.[SingletonMap](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html)

Gets the key.

[getKey()](http://docs.google.com/org/apache/commons/collections4/MapIterator.html#getKey--) - Method in interface org.apache.commons.collections4.[MapIterator](http://docs.google.com/org/apache/commons/collections4/MapIterator.html)

Gets the current key, which is the key returned by the last call to next().

[GETKEY\_INVALID](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#GETKEY_INVALID) - Static variable in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)   [getKeyAnalyzer()](http://docs.google.com/org/apache/commons/collections4/trie/AbstractBitwiseTrie.html#getKeyAnalyzer--) - Method in class org.apache.commons.collections4.trie.[AbstractBitwiseTrie](http://docs.google.com/org/apache/commons/collections4/trie/AbstractBitwiseTrie.html)

Returns the [KeyAnalyzer](http://docs.google.com/org/apache/commons/collections4/trie/KeyAnalyzer.html) that constructed the [Trie](http://docs.google.com/org/apache/commons/collections4/Trie.html).

[getKeys()](http://docs.google.com/org/apache/commons/collections4/keyvalue/MultiKey.html#getKeys--) - Method in class org.apache.commons.collections4.keyvalue.[MultiKey](http://docs.google.com/org/apache/commons/collections4/keyvalue/MultiKey.html)

Gets a clone of the array of keys.

[getLast()](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#getLast--) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)   [getLastNodeReturned()](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedListIterator.html#getLastNodeReturned--) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList.LinkedListIterator](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedListIterator.html)

Gets the last node returned.

[getLCSLength()](http://docs.google.com/org/apache/commons/collections4/sequence/EditScript.html#getLCSLength--) - Method in class org.apache.commons.collections4.sequence.[EditScript](http://docs.google.com/org/apache/commons/collections4/sequence/EditScript.html)

Get the length of the Longest Common Subsequence (LCS).

[getList()](http://docs.google.com/org/apache/commons/collections4/list/TransformedList.html#getList--) - Method in class org.apache.commons.collections4.list.[TransformedList](http://docs.google.com/org/apache/commons/collections4/list/TransformedList.html)

Gets the decorated list.

[getListIterator()](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractListIteratorDecorator.html#getListIterator--) - Method in class org.apache.commons.collections4.iterators.[AbstractListIteratorDecorator](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractListIteratorDecorator.html)

Gets the iterator being decorated.

[getListIterator()](http://docs.google.com/org/apache/commons/collections4/iterators/FilterListIterator.html#getListIterator--) - Method in class org.apache.commons.collections4.iterators.[FilterListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/FilterListIterator.html)

Gets the iterator this iterator is using.

[getLong(Map<? super K, ?>, K)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#getLong-java.util.Map-K-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Gets a Long from a Map in a null-safe manner.

[getLong(Map<? super K, ?>, K, Long)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#getLong-java.util.Map-K-java.lang.Long-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Looks up the given key in the given map, converting the result into a long, using the default value if the conversion fails.

[getLongValue(Map<? super K, ?>, K)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#getLongValue-java.util.Map-K-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Gets a long from a Map in a null-safe manner.

[getLongValue(Map<? super K, ?>, K, long)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#getLongValue-java.util.Map-K-long-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Gets a long from a Map in a null-safe manner, using the default value if the conversion fails.

[getMap()](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html#getMap--) - Method in class org.apache.commons.collections4.bag.[AbstractMapBag](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html)

Utility method for implementations to access the map that backs this bag.

[getMap()](http://docs.google.com/org/apache/commons/collections4/bag/TreeBag.html#getMap--) - Method in class org.apache.commons.collections4.bag.[TreeBag](http://docs.google.com/org/apache/commons/collections4/bag/TreeBag.html)   [getMap()](http://docs.google.com/org/apache/commons/collections4/functors/MapTransformer.html#getMap--) - Method in class org.apache.commons.collections4.functors.[MapTransformer](http://docs.google.com/org/apache/commons/collections4/functors/MapTransformer.html)

Gets the map to lookup in.

[getMap(Map<? super K, ?>, K)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#getMap-java.util.Map-K-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Gets a Map from a Map in a null-safe manner.

[getMap(Map<? super K, ?>, K, Map<?, ?>)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#getMap-java.util.Map-K-java.util.Map-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Looks up the given key in the given map, converting the result into a map, using the default value if the conversion fails.

[getMap()](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractListValuedMap.html#getMap--) - Method in class org.apache.commons.collections4.multimap.[AbstractListValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractListValuedMap.html)   [getMap()](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html#getMap--) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html)

Gets the map being wrapped.

[getMap()](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractSetValuedMap.html#getMap--) - Method in class org.apache.commons.collections4.multimap.[AbstractSetValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractSetValuedMap.html)   [getMap()](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.html#getMap--) - Method in class org.apache.commons.collections4.multiset.[AbstractMapMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.html)

Utility method for implementations to access the map that backs this multiset.

[getMapEntry()](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractMapEntryDecorator.html#getMapEntry--) - Method in class org.apache.commons.collections4.keyvalue.[AbstractMapEntryDecorator](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractMapEntryDecorator.html)

Gets the map being decorated.

[getMapIterator()](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractMapIteratorDecorator.html#getMapIterator--) - Method in class org.apache.commons.collections4.iterators.[AbstractMapIteratorDecorator](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractMapIteratorDecorator.html)

Gets the iterator being decorated.

[getMaximumCacheSize()](http://docs.google.com/org/apache/commons/collections4/list/NodeCachingLinkedList.html#getMaximumCacheSize--) - Method in class org.apache.commons.collections4.list.[NodeCachingLinkedList](http://docs.google.com/org/apache/commons/collections4/list/NodeCachingLinkedList.html)

Gets the maximum size of the cache.

[getModifications()](http://docs.google.com/org/apache/commons/collections4/sequence/EditScript.html#getModifications--) - Method in class org.apache.commons.collections4.sequence.[EditScript](http://docs.google.com/org/apache/commons/collections4/sequence/EditScript.html)

Get the number of effective modifications.

[getMutator()](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html#getMutator--) - Method in class org.apache.commons.collections4.collection.[CompositeCollection](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html)

Get the collection mutator to be used for this CompositeCollection.

[getMutator()](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html#getMutator--) - Method in class org.apache.commons.collections4.set.[CompositeSet](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html)

Get the set mutator to be used for this CompositeSet.

[getNextNode()](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.Node.html#getNextNode--) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList.Node](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.Node.html)

Gets the next node.

[getNode(int, boolean)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#getNode-int-boolean-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)

Gets the node at a particular index.

[getNodeFromCache()](http://docs.google.com/org/apache/commons/collections4/list/NodeCachingLinkedList.html#getNodeFromCache--) - Method in class org.apache.commons.collections4.list.[NodeCachingLinkedList](http://docs.google.com/org/apache/commons/collections4/list/NodeCachingLinkedList.html)

Gets a node from the cache.

[getNumber(Map<? super K, ?>, K)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#getNumber-java.util.Map-K-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Gets a Number from a Map in a null-safe manner.

[getNumber(Map<? super K, ?>, K, Number)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#getNumber-java.util.Map-K-java.lang.Number-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Looks up the given key in the given map, converting the result into a number, using the default value if the conversion fails.

[getObject(Map<? super K, V>, K)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#getObject-java.util.Map-K-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Gets from a Map in a null-safe manner.

[getObject(Map<K, V>, K, V)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#getObject-java.util.Map-K-V-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Looks up the given key in the given map, converting null into the given default value.

[getObject()](http://docs.google.com/org/apache/commons/collections4/sequence/EditCommand.html#getObject--) - Method in class org.apache.commons.collections4.sequence.[EditCommand](http://docs.google.com/org/apache/commons/collections4/sequence/EditCommand.html)

Returns the object associated with this command.

[getOrderedMapIterator()](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractOrderedMapIteratorDecorator.html#getOrderedMapIterator--) - Method in class org.apache.commons.collections4.iterators.[AbstractOrderedMapIteratorDecorator](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractOrderedMapIteratorDecorator.html)

Gets the iterator being decorated.

[getPredicate()](http://docs.google.com/org/apache/commons/collections4/functors/IfClosure.html#getPredicate--) - Method in class org.apache.commons.collections4.functors.[IfClosure](http://docs.google.com/org/apache/commons/collections4/functors/IfClosure.html)

Gets the predicate.

[getPredicate()](http://docs.google.com/org/apache/commons/collections4/functors/IfTransformer.html#getPredicate--) - Method in class org.apache.commons.collections4.functors.[IfTransformer](http://docs.google.com/org/apache/commons/collections4/functors/IfTransformer.html)

Gets the predicate.

[getPredicate()](http://docs.google.com/org/apache/commons/collections4/functors/PredicateTransformer.html#getPredicate--) - Method in class org.apache.commons.collections4.functors.[PredicateTransformer](http://docs.google.com/org/apache/commons/collections4/functors/PredicateTransformer.html)

Gets the predicate.

[getPredicate()](http://docs.google.com/org/apache/commons/collections4/functors/WhileClosure.html#getPredicate--) - Method in class org.apache.commons.collections4.functors.[WhileClosure](http://docs.google.com/org/apache/commons/collections4/functors/WhileClosure.html)

Gets the predicate in use.

[getPredicate()](http://docs.google.com/org/apache/commons/collections4/iterators/FilterIterator.html#getPredicate--) - Method in class org.apache.commons.collections4.iterators.[FilterIterator](http://docs.google.com/org/apache/commons/collections4/iterators/FilterIterator.html)

Gets the predicate this iterator is using.

[getPredicate()](http://docs.google.com/org/apache/commons/collections4/iterators/FilterListIterator.html#getPredicate--) - Method in class org.apache.commons.collections4.iterators.[FilterListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/FilterListIterator.html)

Gets the predicate this iterator is using.

[getPredicates()](http://docs.google.com/org/apache/commons/collections4/functors/AbstractQuantifierPredicate.html#getPredicates--) - Method in class org.apache.commons.collections4.functors.[AbstractQuantifierPredicate](http://docs.google.com/org/apache/commons/collections4/functors/AbstractQuantifierPredicate.html)

Gets the predicates.

[getPredicates()](http://docs.google.com/org/apache/commons/collections4/functors/AndPredicate.html#getPredicates--) - Method in class org.apache.commons.collections4.functors.[AndPredicate](http://docs.google.com/org/apache/commons/collections4/functors/AndPredicate.html)

Gets the two predicates being decorated as an array.

[getPredicates()](http://docs.google.com/org/apache/commons/collections4/functors/NotPredicate.html#getPredicates--) - Method in class org.apache.commons.collections4.functors.[NotPredicate](http://docs.google.com/org/apache/commons/collections4/functors/NotPredicate.html)

Gets the predicate being decorated.

[getPredicates()](http://docs.google.com/org/apache/commons/collections4/functors/NullIsExceptionPredicate.html#getPredicates--) - Method in class org.apache.commons.collections4.functors.[NullIsExceptionPredicate](http://docs.google.com/org/apache/commons/collections4/functors/NullIsExceptionPredicate.html)

Gets the predicate being decorated.

[getPredicates()](http://docs.google.com/org/apache/commons/collections4/functors/NullIsFalsePredicate.html#getPredicates--) - Method in class org.apache.commons.collections4.functors.[NullIsFalsePredicate](http://docs.google.com/org/apache/commons/collections4/functors/NullIsFalsePredicate.html)

Gets the predicate being decorated.

[getPredicates()](http://docs.google.com/org/apache/commons/collections4/functors/NullIsTruePredicate.html#getPredicates--) - Method in class org.apache.commons.collections4.functors.[NullIsTruePredicate](http://docs.google.com/org/apache/commons/collections4/functors/NullIsTruePredicate.html)

Gets the predicate being decorated.

[getPredicates()](http://docs.google.com/org/apache/commons/collections4/functors/OrPredicate.html#getPredicates--) - Method in class org.apache.commons.collections4.functors.[OrPredicate](http://docs.google.com/org/apache/commons/collections4/functors/OrPredicate.html)

Gets the two predicates being decorated as an array.

[getPredicates()](http://docs.google.com/org/apache/commons/collections4/functors/PredicateDecorator.html#getPredicates--) - Method in interface org.apache.commons.collections4.functors.[PredicateDecorator](http://docs.google.com/org/apache/commons/collections4/functors/PredicateDecorator.html)

Gets the predicates being decorated as an array.

[getPredicates()](http://docs.google.com/org/apache/commons/collections4/functors/SwitchClosure.html#getPredicates--) - Method in class org.apache.commons.collections4.functors.[SwitchClosure](http://docs.google.com/org/apache/commons/collections4/functors/SwitchClosure.html)

Gets the predicates.

[getPredicates()](http://docs.google.com/org/apache/commons/collections4/functors/SwitchTransformer.html#getPredicates--) - Method in class org.apache.commons.collections4.functors.[SwitchTransformer](http://docs.google.com/org/apache/commons/collections4/functors/SwitchTransformer.html)

Gets the predicates.

[getPredicates()](http://docs.google.com/org/apache/commons/collections4/functors/TransformedPredicate.html#getPredicates--) - Method in class org.apache.commons.collections4.functors.[TransformedPredicate](http://docs.google.com/org/apache/commons/collections4/functors/TransformedPredicate.html)

Gets the predicate being decorated.

[getPreviousNode()](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.Node.html#getPreviousNode--) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList.Node](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.Node.html)

Gets the previous node.

[getQueue()](http://docs.google.com/org/apache/commons/collections4/queue/TransformedQueue.html#getQueue--) - Method in class org.apache.commons.collections4.queue.[TransformedQueue](http://docs.google.com/org/apache/commons/collections4/queue/TransformedQueue.html)

Gets the decorated queue.

[getScript()](http://docs.google.com/org/apache/commons/collections4/sequence/SequencesComparator.html#getScript--) - Method in class org.apache.commons.collections4.sequence.[SequencesComparator](http://docs.google.com/org/apache/commons/collections4/sequence/SequencesComparator.html)

Get the [EditScript](http://docs.google.com/org/apache/commons/collections4/sequence/EditScript.html) object.

[getSets()](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html#getSets--) - Method in class org.apache.commons.collections4.set.[CompositeSet](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html)

Gets the sets being decorated.

[getShort(Map<? super K, ?>, K)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#getShort-java.util.Map-K-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Gets a Short from a Map in a null-safe manner.

[getShort(Map<? super K, ?>, K, Short)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#getShort-java.util.Map-K-java.lang.Short-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Looks up the given key in the given map, converting the result into a short, using the default value if the conversion fails.

[getShortValue(Map<? super K, ?>, K)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#getShortValue-java.util.Map-K-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Gets a short from a Map in a null-safe manner.

[getShortValue(Map<? super K, ?>, K, short)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#getShortValue-java.util.Map-K-short-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Gets a short from a Map in a null-safe manner, using the default value if the conversion fails.

[getSortedBag()](http://docs.google.com/org/apache/commons/collections4/bag/SynchronizedSortedBag.html#getSortedBag--) - Method in class org.apache.commons.collections4.bag.[SynchronizedSortedBag](http://docs.google.com/org/apache/commons/collections4/bag/SynchronizedSortedBag.html)

Gets the bag being decorated.

[getSortedBag()](http://docs.google.com/org/apache/commons/collections4/bag/TransformedSortedBag.html#getSortedBag--) - Method in class org.apache.commons.collections4.bag.[TransformedSortedBag](http://docs.google.com/org/apache/commons/collections4/bag/TransformedSortedBag.html)

Gets the decorated bag.

[getSortedMap()](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeSortedMap.html#getSortedMap--) - Method in class org.apache.commons.collections4.map.[FixedSizeSortedMap](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeSortedMap.html)

Gets the map being decorated.

[getSortedMap()](http://docs.google.com/org/apache/commons/collections4/map/LazySortedMap.html#getSortedMap--) - Method in class org.apache.commons.collections4.map.[LazySortedMap](http://docs.google.com/org/apache/commons/collections4/map/LazySortedMap.html)

Gets the map being decorated.

[getSortedMap()](http://docs.google.com/org/apache/commons/collections4/map/PredicatedSortedMap.html#getSortedMap--) - Method in class org.apache.commons.collections4.map.[PredicatedSortedMap](http://docs.google.com/org/apache/commons/collections4/map/PredicatedSortedMap.html)

Gets the map being decorated.

[getSortedMap()](http://docs.google.com/org/apache/commons/collections4/map/TransformedSortedMap.html#getSortedMap--) - Method in class org.apache.commons.collections4.map.[TransformedSortedMap](http://docs.google.com/org/apache/commons/collections4/map/TransformedSortedMap.html)

Gets the map being decorated.

[getSortedSet()](http://docs.google.com/org/apache/commons/collections4/set/TransformedSortedSet.html#getSortedSet--) - Method in class org.apache.commons.collections4.set.[TransformedSortedSet](http://docs.google.com/org/apache/commons/collections4/set/TransformedSortedSet.html)

Gets the decorated set.

[getStartIndex()](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayIterator.html#getStartIndex--) - Method in class org.apache.commons.collections4.iterators.[ArrayIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayIterator.html)

Gets the start index to loop from.

[getStartIndex()](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayIterator.html#getStartIndex--) - Method in class org.apache.commons.collections4.iterators.[ObjectArrayIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayIterator.html)

Gets the start index to loop from.

[getString(Map<? super K, ?>, K)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#getString-java.util.Map-K-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Gets a String from a Map in a null-safe manner.

[getString(Map<? super K, ?>, K, String)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#getString-java.util.Map-K-java.lang.String-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Looks up the given key in the given map, converting the result into a string, using the default value if the conversion fails.

[getTransformer()](http://docs.google.com/org/apache/commons/collections4/functors/TransformedPredicate.html#getTransformer--) - Method in class org.apache.commons.collections4.functors.[TransformedPredicate](http://docs.google.com/org/apache/commons/collections4/functors/TransformedPredicate.html)

Gets the transformer in use.

[getTransformer()](http://docs.google.com/org/apache/commons/collections4/functors/TransformerClosure.html#getTransformer--) - Method in class org.apache.commons.collections4.functors.[TransformerClosure](http://docs.google.com/org/apache/commons/collections4/functors/TransformerClosure.html)

Gets the transformer.

[getTransformer()](http://docs.google.com/org/apache/commons/collections4/functors/TransformerPredicate.html#getTransformer--) - Method in class org.apache.commons.collections4.functors.[TransformerPredicate](http://docs.google.com/org/apache/commons/collections4/functors/TransformerPredicate.html)

Gets the transformer.

[getTransformer()](http://docs.google.com/org/apache/commons/collections4/iterators/TransformIterator.html#getTransformer--) - Method in class org.apache.commons.collections4.iterators.[TransformIterator](http://docs.google.com/org/apache/commons/collections4/iterators/TransformIterator.html)

Gets the transformer this iterator is using.

[getTransformers()](http://docs.google.com/org/apache/commons/collections4/functors/ChainedTransformer.html#getTransformers--) - Method in class org.apache.commons.collections4.functors.[ChainedTransformer](http://docs.google.com/org/apache/commons/collections4/functors/ChainedTransformer.html)

Gets the transformers.

[getTransformers()](http://docs.google.com/org/apache/commons/collections4/functors/SwitchTransformer.html#getTransformers--) - Method in class org.apache.commons.collections4.functors.[SwitchTransformer](http://docs.google.com/org/apache/commons/collections4/functors/SwitchTransformer.html)

Gets the transformers.

[getTrueClosure()](http://docs.google.com/org/apache/commons/collections4/functors/IfClosure.html#getTrueClosure--) - Method in class org.apache.commons.collections4.functors.[IfClosure](http://docs.google.com/org/apache/commons/collections4/functors/IfClosure.html)

Gets the closure called when true.

[getTrueFirstComparator()](http://docs.google.com/org/apache/commons/collections4/comparators/BooleanComparator.html#getTrueFirstComparator--) - Static method in class org.apache.commons.collections4.comparators.[BooleanComparator](http://docs.google.com/org/apache/commons/collections4/comparators/BooleanComparator.html)

Returns a BooleanComparator instance that sorts true values before false values.

[getTrueTransformer()](http://docs.google.com/org/apache/commons/collections4/functors/IfTransformer.html#getTrueTransformer--) - Method in class org.apache.commons.collections4.functors.[IfTransformer](http://docs.google.com/org/apache/commons/collections4/functors/IfTransformer.html)

Gets the transformer used when true.

[getType()](http://docs.google.com/org/apache/commons/collections4/functors/InstanceofPredicate.html#getType--) - Method in class org.apache.commons.collections4.functors.[InstanceofPredicate](http://docs.google.com/org/apache/commons/collections4/functors/InstanceofPredicate.html)

Gets the type to compare to.

[getUnknownObjectBehavior()](http://docs.google.com/org/apache/commons/collections4/comparators/FixedOrderComparator.html#getUnknownObjectBehavior--) - Method in class org.apache.commons.collections4.comparators.[FixedOrderComparator](http://docs.google.com/org/apache/commons/collections4/comparators/FixedOrderComparator.html)

Gets the behavior for comparing unknown objects.

[getValue()](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.BidiMapIterator.html#getValue--) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.BidiMapIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.BidiMapIterator.html)   [getValue()](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.BidiOrderedMapIterator.html#getValue--) - Method in class org.apache.commons.collections4.bidimap.[DualTreeBidiMap.BidiOrderedMapIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.BidiOrderedMapIterator.html)   [getValue()](http://docs.google.com/org/apache/commons/collections4/functors/EqualPredicate.html#getValue--) - Method in class org.apache.commons.collections4.functors.[EqualPredicate](http://docs.google.com/org/apache/commons/collections4/functors/EqualPredicate.html)

Gets the value.

[getValue()](http://docs.google.com/org/apache/commons/collections4/functors/IdentityPredicate.html#getValue--) - Method in class org.apache.commons.collections4.functors.[IdentityPredicate](http://docs.google.com/org/apache/commons/collections4/functors/IdentityPredicate.html)

Gets the value.

[getValue()](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractEmptyMapIterator.html#getValue--) - Method in class org.apache.commons.collections4.iterators.[AbstractEmptyMapIterator](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractEmptyMapIterator.html)   [getValue()](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractMapIteratorDecorator.html#getValue--) - Method in class org.apache.commons.collections4.iterators.[AbstractMapIteratorDecorator](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractMapIteratorDecorator.html)

Gets the current value, which is the value associated with the last key returned by next().

[getValue()](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractOrderedMapIteratorDecorator.html#getValue--) - Method in class org.apache.commons.collections4.iterators.[AbstractOrderedMapIteratorDecorator](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractOrderedMapIteratorDecorator.html)

Gets the current value, which is the value associated with the last key returned by next().

[getValue()](http://docs.google.com/org/apache/commons/collections4/iterators/EntrySetMapIterator.html#getValue--) - Method in class org.apache.commons.collections4.iterators.[EntrySetMapIterator](http://docs.google.com/org/apache/commons/collections4/iterators/EntrySetMapIterator.html)

Gets the current value, which is the value associated with the last key returned by next().

[getValue()](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableMapIterator.html#getValue--) - Method in class org.apache.commons.collections4.iterators.[UnmodifiableMapIterator](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableMapIterator.html)   [getValue()](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableOrderedMapIterator.html#getValue--) - Method in class org.apache.commons.collections4.iterators.[UnmodifiableOrderedMapIterator](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableOrderedMapIterator.html)   [getValue()](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractKeyValue.html#getValue--) - Method in class org.apache.commons.collections4.keyvalue.[AbstractKeyValue](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractKeyValue.html)

Gets the value from the pair.

[getValue()](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractMapEntryDecorator.html#getValue--) - Method in class org.apache.commons.collections4.keyvalue.[AbstractMapEntryDecorator](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractMapEntryDecorator.html)   [getValue()](http://docs.google.com/org/apache/commons/collections4/KeyValue.html#getValue--) - Method in interface org.apache.commons.collections4.[KeyValue](http://docs.google.com/org/apache/commons/collections4/KeyValue.html)

Gets the value from the pair.

[getValue()](http://docs.google.com/org/apache/commons/collections4/keyvalue/TiedMapEntry.html#getValue--) - Method in class org.apache.commons.collections4.keyvalue.[TiedMapEntry](http://docs.google.com/org/apache/commons/collections4/keyvalue/TiedMapEntry.html)

Gets the value of this entry direct from the map.

[getValue()](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.Node.html#getValue--) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList.Node](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.Node.html)

Gets the value of the node.

[getValue()](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html#getValue--) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap.HashEntry](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html)   [getValue()](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashMapIterator.html#getValue--) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap.HashMapIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashMapIterator.html)   [getValue()](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkMapIterator.html#getValue--) - Method in class org.apache.commons.collections4.map.[AbstractLinkedMap.LinkMapIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkMapIterator.html)   [getValue()](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html#getValue--) - Method in class org.apache.commons.collections4.map.[AbstractReferenceMap.ReferenceEntry](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html)

Gets the value from the entry.

[getValue()](http://docs.google.com/org/apache/commons/collections4/map/EntrySetToMapIteratorAdapter.html#getValue--) - Method in class org.apache.commons.collections4.map.[EntrySetToMapIteratorAdapter](http://docs.google.com/org/apache/commons/collections4/map/EntrySetToMapIteratorAdapter.html)

Gets the current value, which is the value associated with the last key returned by next().

[getValue(int)](http://docs.google.com/org/apache/commons/collections4/map/LinkedMap.html#getValue-int-) - Method in class org.apache.commons.collections4.map.[LinkedMap](http://docs.google.com/org/apache/commons/collections4/map/LinkedMap.html)

Gets the value at the specified index.

[getValue(int)](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html#getValue-int-) - Method in class org.apache.commons.collections4.map.[ListOrderedMap](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html)

Gets the value at the specified index.

[getValue()](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html#getValue--) - Method in class org.apache.commons.collections4.map.[SingletonMap](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html)

Gets the value.

[getValue()](http://docs.google.com/org/apache/commons/collections4/MapIterator.html#getValue--) - Method in interface org.apache.commons.collections4.[MapIterator](http://docs.google.com/org/apache/commons/collections4/MapIterator.html)

Gets the current value, which is the value associated with the last key returned by next().

[GETVALUE\_INVALID](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#GETVALUE_INVALID) - Static variable in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)   [getValuesAsBag(MultiValuedMap<K, V>, K)](http://docs.google.com/org/apache/commons/collections4/MultiMapUtils.html#getValuesAsBag-org.apache.commons.collections4.MultiValuedMap-K-) - Static method in class org.apache.commons.collections4.[MultiMapUtils](http://docs.google.com/org/apache/commons/collections4/MultiMapUtils.html)

Gets a Bag from MultiValuedMap in a null-safe manner.

[getValuesAsList(MultiValuedMap<K, V>, K)](http://docs.google.com/org/apache/commons/collections4/MultiMapUtils.html#getValuesAsList-org.apache.commons.collections4.MultiValuedMap-K-) - Static method in class org.apache.commons.collections4.[MultiMapUtils](http://docs.google.com/org/apache/commons/collections4/MultiMapUtils.html)

Gets a List from MultiValuedMap in a null-safe manner.

[getValuesAsSet(MultiValuedMap<K, V>, K)](http://docs.google.com/org/apache/commons/collections4/MultiMapUtils.html#getValuesAsSet-org.apache.commons.collections4.MultiValuedMap-K-) - Static method in class org.apache.commons.collections4.[MultiMapUtils](http://docs.google.com/org/apache/commons/collections4/MultiMapUtils.html)

Gets a Set from MultiValuedMap in a null-safe manner.

[GrowthList](http://docs.google.com/org/apache/commons/collections4/list/GrowthList.html)<[E](http://docs.google.com/org/apache/commons/collections4/list/GrowthList.html)> - Class in [org.apache.commons.collections4.list](http://docs.google.com/org/apache/commons/collections4/list/package-summary.html)

Decorates another List to make it seamlessly grow when indices larger than the list size are used on add and set, avoiding most IndexOutOfBoundsExceptions.

[GrowthList()](http://docs.google.com/org/apache/commons/collections4/list/GrowthList.html#GrowthList--) - Constructor for class org.apache.commons.collections4.list.[GrowthList](http://docs.google.com/org/apache/commons/collections4/list/GrowthList.html)

Constructor that uses an ArrayList internally.

[GrowthList(int)](http://docs.google.com/org/apache/commons/collections4/list/GrowthList.html#GrowthList-int-) - Constructor for class org.apache.commons.collections4.list.[GrowthList](http://docs.google.com/org/apache/commons/collections4/list/GrowthList.html)

Constructor that uses an ArrayList internally.

[GrowthList(List<E>)](http://docs.google.com/org/apache/commons/collections4/list/GrowthList.html#GrowthList-java.util.List-) - Constructor for class org.apache.commons.collections4.list.[GrowthList](http://docs.google.com/org/apache/commons/collections4/list/GrowthList.html)

Constructor that wraps (not copies).

[growthList(List<E>)](http://docs.google.com/org/apache/commons/collections4/list/GrowthList.html#growthList-java.util.List-) - Static method in class org.apache.commons.collections4.list.[GrowthList](http://docs.google.com/org/apache/commons/collections4/list/GrowthList.html)

Factory method to create a growth list.

## H

[handleReplacement(int, List<T>, List<T>)](http://docs.google.com/org/apache/commons/collections4/sequence/ReplacementsHandler.html#handleReplacement-int-java.util.List-java.util.List-) - Method in interface org.apache.commons.collections4.sequence.[ReplacementsHandler](http://docs.google.com/org/apache/commons/collections4/sequence/ReplacementsHandler.html)

Handle two synchronized sequences.

[hash(T)](http://docs.google.com/org/apache/commons/collections4/Equator.html#hash-T-) - Method in interface org.apache.commons.collections4.[Equator](http://docs.google.com/org/apache/commons/collections4/Equator.html)

Calculates the hash for the object, based on the method of equality used in the equate method.

[hash(T)](http://docs.google.com/org/apache/commons/collections4/functors/DefaultEquator.html#hash-T-) - Method in class org.apache.commons.collections4.functors.[DefaultEquator](http://docs.google.com/org/apache/commons/collections4/functors/DefaultEquator.html)

Calculates the hash for the object, based on the method of equality used in the equate method.

[hash(Object)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#hash-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Gets the hash code for the key specified.

[hash(Object, Object)](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html#hash-java.lang.Object-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[MultiKeyMap](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html)

Gets the hash code for the specified multi-key.

[hash(Object, Object, Object)](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html#hash-java.lang.Object-java.lang.Object-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[MultiKeyMap](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html)

Gets the hash code for the specified multi-key.

[hash(Object, Object, Object, Object)](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html#hash-java.lang.Object-java.lang.Object-java.lang.Object-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[MultiKeyMap](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html)

Gets the hash code for the specified multi-key.

[hash(Object, Object, Object, Object, Object)](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html#hash-java.lang.Object-java.lang.Object-java.lang.Object-java.lang.Object-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[MultiKeyMap](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html)

Gets the hash code for the specified multi-key.

[hash(Object)](http://docs.google.com/org/apache/commons/collections4/map/ReferenceIdentityMap.html#hash-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[ReferenceIdentityMap](http://docs.google.com/org/apache/commons/collections4/map/ReferenceIdentityMap.html)

Gets the hash code for the key specified.

[HashBag](http://docs.google.com/org/apache/commons/collections4/bag/HashBag.html)<[E](http://docs.google.com/org/apache/commons/collections4/bag/HashBag.html)> - Class in [org.apache.commons.collections4.bag](http://docs.google.com/org/apache/commons/collections4/bag/package-summary.html)

Implements Bag, using a [HashMap](https://docs.oracle.com/javase/7/docs/api/java/util/HashMap.html?is-external=true) to provide the data storage.

[HashBag()](http://docs.google.com/org/apache/commons/collections4/bag/HashBag.html#HashBag--) - Constructor for class org.apache.commons.collections4.bag.[HashBag](http://docs.google.com/org/apache/commons/collections4/bag/HashBag.html)

Constructs an empty [HashBag](http://docs.google.com/org/apache/commons/collections4/bag/HashBag.html).

[HashBag(Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/bag/HashBag.html#HashBag-java.util.Collection-) - Constructor for class org.apache.commons.collections4.bag.[HashBag](http://docs.google.com/org/apache/commons/collections4/bag/HashBag.html)

Constructs a bag containing all the members of the given collection.

[hashCode()](http://docs.google.com/org/apache/commons/collections4/bag/AbstractBagDecorator.html#hashCode--) - Method in class org.apache.commons.collections4.bag.[AbstractBagDecorator](http://docs.google.com/org/apache/commons/collections4/bag/AbstractBagDecorator.html)   [hashCode()](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html#hashCode--) - Method in class org.apache.commons.collections4.bag.[AbstractMapBag](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html)

Gets a hash code for the Bag compatible with the definition of equals.

[hashCode()](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.MutableInteger.html#hashCode--) - Method in class org.apache.commons.collections4.bag.[AbstractMapBag.MutableInteger](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.MutableInteger.html)   [hashCode()](http://docs.google.com/org/apache/commons/collections4/bag/PredicatedBag.html#hashCode--) - Method in class org.apache.commons.collections4.bag.[PredicatedBag](http://docs.google.com/org/apache/commons/collections4/bag/PredicatedBag.html)   [hashCode()](http://docs.google.com/org/apache/commons/collections4/bag/SynchronizedBag.html#hashCode--) - Method in class org.apache.commons.collections4.bag.[SynchronizedBag](http://docs.google.com/org/apache/commons/collections4/bag/SynchronizedBag.html)   [hashCode()](http://docs.google.com/org/apache/commons/collections4/bag/TransformedBag.html#hashCode--) - Method in class org.apache.commons.collections4.bag.[TransformedBag](http://docs.google.com/org/apache/commons/collections4/bag/TransformedBag.html)   [hashCode()](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html#hashCode--) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html)   [hashCode()](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.View.html#hashCode--) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.View](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.View.html)   [hashCode()](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html#hashCode--) - Method in class org.apache.commons.collections4.bidimap.[TreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html)

Gets the hash code value for this map as per the API.

[hashCode()](http://docs.google.com/org/apache/commons/collections4/collection/SynchronizedCollection.html#hashCode--) - Method in class org.apache.commons.collections4.collection.[SynchronizedCollection](http://docs.google.com/org/apache/commons/collections4/collection/SynchronizedCollection.html)   [hashCode()](http://docs.google.com/org/apache/commons/collections4/comparators/BooleanComparator.html#hashCode--) - Method in class org.apache.commons.collections4.comparators.[BooleanComparator](http://docs.google.com/org/apache/commons/collections4/comparators/BooleanComparator.html)

Implement a hash code for this comparator that is consistent with [equals](http://docs.google.com/org/apache/commons/collections4/comparators/BooleanComparator.html#equals-java.lang.Object-).

[hashCode()](http://docs.google.com/org/apache/commons/collections4/comparators/ComparableComparator.html#hashCode--) - Method in class org.apache.commons.collections4.comparators.[ComparableComparator](http://docs.google.com/org/apache/commons/collections4/comparators/ComparableComparator.html)

Implement a hash code for this comparator that is consistent with [equals](http://docs.google.com/org/apache/commons/collections4/comparators/ComparableComparator.html#equals-java.lang.Object-).

[hashCode()](http://docs.google.com/org/apache/commons/collections4/comparators/ComparatorChain.html#hashCode--) - Method in class org.apache.commons.collections4.comparators.[ComparatorChain](http://docs.google.com/org/apache/commons/collections4/comparators/ComparatorChain.html)

Implement a hash code for this comparator that is consistent with [equals](http://docs.google.com/org/apache/commons/collections4/comparators/ComparatorChain.html#equals-java.lang.Object-).

[hashCode()](http://docs.google.com/org/apache/commons/collections4/comparators/FixedOrderComparator.html#hashCode--) - Method in class org.apache.commons.collections4.comparators.[FixedOrderComparator](http://docs.google.com/org/apache/commons/collections4/comparators/FixedOrderComparator.html)

Implement a hash code for this comparator that is consistent with [equals](http://docs.google.com/org/apache/commons/collections4/comparators/FixedOrderComparator.html#equals-java.lang.Object-).

[hashCode()](http://docs.google.com/org/apache/commons/collections4/comparators/NullComparator.html#hashCode--) - Method in class org.apache.commons.collections4.comparators.[NullComparator](http://docs.google.com/org/apache/commons/collections4/comparators/NullComparator.html)

Implement a hash code for this comparator that is consistent with [NullComparator.equals(Object)](http://docs.google.com/org/apache/commons/collections4/comparators/NullComparator.html#equals-java.lang.Object-).

[hashCode()](http://docs.google.com/org/apache/commons/collections4/comparators/ReverseComparator.html#hashCode--) - Method in class org.apache.commons.collections4.comparators.[ReverseComparator](http://docs.google.com/org/apache/commons/collections4/comparators/ReverseComparator.html)

Implement a hash code for this comparator that is consistent with [equals](http://docs.google.com/org/apache/commons/collections4/comparators/ReverseComparator.html#equals-java.lang.Object-).

[hashCode()](http://docs.google.com/org/apache/commons/collections4/comparators/TransformingComparator.html#hashCode--) - Method in class org.apache.commons.collections4.comparators.[TransformingComparator](http://docs.google.com/org/apache/commons/collections4/comparators/TransformingComparator.html)

Implement a hash code for this comparator that is consistent with [equals](http://docs.google.com/org/apache/commons/collections4/comparators/TransformingComparator.html#equals-java.lang.Object-).

[hashCode()](http://docs.google.com/org/apache/commons/collections4/functors/ConstantTransformer.html#hashCode--) - Method in class org.apache.commons.collections4.functors.[ConstantTransformer](http://docs.google.com/org/apache/commons/collections4/functors/ConstantTransformer.html) [hashCode()](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractMapEntry.html#hashCode--) - Method in class org.apache.commons.collections4.keyvalue.[AbstractMapEntry](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractMapEntry.html)

Gets a hashCode compatible with the equals method.

[hashCode()](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractMapEntryDecorator.html#hashCode--) - Method in class org.apache.commons.collections4.keyvalue.[AbstractMapEntryDecorator](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractMapEntryDecorator.html)   [hashCode()](http://docs.google.com/org/apache/commons/collections4/keyvalue/DefaultKeyValue.html#hashCode--) - Method in class org.apache.commons.collections4.keyvalue.[DefaultKeyValue](http://docs.google.com/org/apache/commons/collections4/keyvalue/DefaultKeyValue.html)

Gets a hashCode compatible with the equals method.

[hashCode()](http://docs.google.com/org/apache/commons/collections4/keyvalue/MultiKey.html#hashCode--) - Method in class org.apache.commons.collections4.keyvalue.[MultiKey](http://docs.google.com/org/apache/commons/collections4/keyvalue/MultiKey.html)

Gets the combined hash code that is computed from all the keys.

[hashCode()](http://docs.google.com/org/apache/commons/collections4/keyvalue/TiedMapEntry.html#hashCode--) - Method in class org.apache.commons.collections4.keyvalue.[TiedMapEntry](http://docs.google.com/org/apache/commons/collections4/keyvalue/TiedMapEntry.html)

Gets a hashCode compatible with the equals method.

[hashCode()](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#hashCode--) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)   [hashCode()](http://docs.google.com/org/apache/commons/collections4/list/AbstractListDecorator.html#hashCode--) - Method in class org.apache.commons.collections4.list.[AbstractListDecorator](http://docs.google.com/org/apache/commons/collections4/list/AbstractListDecorator.html)   [hashCode()](http://docs.google.com/org/apache/commons/collections4/list/PredicatedList.html#hashCode--) - Method in class org.apache.commons.collections4.list.[PredicatedList](http://docs.google.com/org/apache/commons/collections4/list/PredicatedList.html)   [hashCode()](http://docs.google.com/org/apache/commons/collections4/list/TransformedList.html#hashCode--) - Method in class org.apache.commons.collections4.list.[TransformedList](http://docs.google.com/org/apache/commons/collections4/list/TransformedList.html)   [hashCode()](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#hashCode--) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Gets the standard Map hashCode.

[hashCode](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html#hashCode) - Variable in class org.apache.commons.collections4.map.[AbstractHashedMap.HashEntry](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html)

The hash code of the key

[hashCode()](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html#hashCode--) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap.HashEntry](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html)   [hashCode()](http://docs.google.com/org/apache/commons/collections4/map/AbstractMapDecorator.html#hashCode--) - Method in class org.apache.commons.collections4.map.[AbstractMapDecorator](http://docs.google.com/org/apache/commons/collections4/map/AbstractMapDecorator.html)   [hashCode()](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html#hashCode--) - Method in class org.apache.commons.collections4.map.[AbstractReferenceMap.ReferenceEntry](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html)

Gets the hashcode of the entry using temporary hard references.

[hashCode()](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html#hashCode--) - Method in class org.apache.commons.collections4.map.[CompositeMap](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html)

Gets a hash code for the Map as per the Map specification.

[hashCode()](http://docs.google.com/org/apache/commons/collections4/map/Flat3Map.html#hashCode--) - Method in class org.apache.commons.collections4.map.[Flat3Map](http://docs.google.com/org/apache/commons/collections4/map/Flat3Map.html)

Gets the standard Map hashCode.

[hashCode()](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html#hashCode--) - Method in class org.apache.commons.collections4.map.[SingletonMap](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html)

Gets the standard Map hashCode.

[hashCode()](http://docs.google.com/org/apache/commons/collections4/map/StaticBucketMap.html#hashCode--) - Method in class org.apache.commons.collections4.map.[StaticBucketMap](http://docs.google.com/org/apache/commons/collections4/map/StaticBucketMap.html)

Gets the hash code, as per the Map specification.

[hashCode()](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html#hashCode--) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html)   [hashCode()](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html#hashCode--) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMapDecorator](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html)   [hashCode()](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.html#hashCode--) - Method in class org.apache.commons.collections4.multiset.[AbstractMapMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.html)   [hashCode()](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.MutableInteger.html#hashCode--) - Method in class org.apache.commons.collections4.multiset.[AbstractMapMultiSet.MutableInteger](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.MutableInteger.html)   [hashCode()](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.AbstractEntry.html#hashCode--) - Method in class org.apache.commons.collections4.multiset.[AbstractMultiSet.AbstractEntry](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.AbstractEntry.html)   [hashCode()](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html#hashCode--) - Method in class org.apache.commons.collections4.multiset.[AbstractMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html)   [hashCode()](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSetDecorator.html#hashCode--) - Method in class org.apache.commons.collections4.multiset.[AbstractMultiSetDecorator](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSetDecorator.html)   [hashCode()](http://docs.google.com/org/apache/commons/collections4/MultiSet.Entry.html#hashCode--) - Method in interface org.apache.commons.collections4.[MultiSet.Entry](http://docs.google.com/org/apache/commons/collections4/MultiSet.Entry.html)

Returns the hash code value for this multiset entry.

[hashCode()](http://docs.google.com/org/apache/commons/collections4/MultiSet.html#hashCode--) - Method in interface org.apache.commons.collections4.[MultiSet](http://docs.google.com/org/apache/commons/collections4/MultiSet.html)

Gets a hash code for the MultiSet compatible with the definition of equals.

[hashCode()](http://docs.google.com/org/apache/commons/collections4/multiset/PredicatedMultiSet.html#hashCode--) - Method in class org.apache.commons.collections4.multiset.[PredicatedMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/PredicatedMultiSet.html)   [hashCode()](http://docs.google.com/org/apache/commons/collections4/multiset/SynchronizedMultiSet.html#hashCode--) - Method in class org.apache.commons.collections4.multiset.[SynchronizedMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/SynchronizedMultiSet.html)   [hashCode()](http://docs.google.com/org/apache/commons/collections4/queue/SynchronizedQueue.html#hashCode--) - Method in class org.apache.commons.collections4.queue.[SynchronizedQueue](http://docs.google.com/org/apache/commons/collections4/queue/SynchronizedQueue.html)   [hashCode()](http://docs.google.com/org/apache/commons/collections4/set/AbstractSetDecorator.html#hashCode--) - Method in class org.apache.commons.collections4.set.[AbstractSetDecorator](http://docs.google.com/org/apache/commons/collections4/set/AbstractSetDecorator.html)   [hashCode()](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html#hashCode--) - Method in class org.apache.commons.collections4.set.[CompositeSet](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html) [hashCode()](http://docs.google.com/org/apache/commons/collections4/set/MapBackedSet.html#hashCode--) - Method in class org.apache.commons.collections4.set.[MapBackedSet](http://docs.google.com/org/apache/commons/collections4/set/MapBackedSet.html)   [hashCode()](http://docs.google.com/org/apache/commons/collections4/set/PredicatedSet.html#hashCode--) - Method in class org.apache.commons.collections4.set.[PredicatedSet](http://docs.google.com/org/apache/commons/collections4/set/PredicatedSet.html)   [hashCode()](http://docs.google.com/org/apache/commons/collections4/set/TransformedSet.html#hashCode--) - Method in class org.apache.commons.collections4.set.[TransformedSet](http://docs.google.com/org/apache/commons/collections4/set/TransformedSet.html)   [hashCode()](http://docs.google.com/org/apache/commons/collections4/splitmap/AbstractIterableGetMapDecorator.html#hashCode--) - Method in class org.apache.commons.collections4.splitmap.[AbstractIterableGetMapDecorator](http://docs.google.com/org/apache/commons/collections4/splitmap/AbstractIterableGetMapDecorator.html)   [hashCode()](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html#hashCode--) - Method in class org.apache.commons.collections4.trie.[UnmodifiableTrie](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html)   [HASHCODE\_NULL](http://docs.google.com/org/apache/commons/collections4/functors/DefaultEquator.html#HASHCODE_NULL) - Static variable in class org.apache.commons.collections4.functors.[DefaultEquator](http://docs.google.com/org/apache/commons/collections4/functors/DefaultEquator.html)

Hashcode used for null objects.

[hashCodeForList(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/ListUtils.html#hashCodeForList-java.util.Collection-) - Static method in class org.apache.commons.collections4.[ListUtils](http://docs.google.com/org/apache/commons/collections4/ListUtils.html)

Generates a hash code using the algorithm specified in [List.hashCode()](https://docs.oracle.com/javase/7/docs/api/java/util/List.html?is-external=true#hashCode--).

[hashCodeForSet(Collection<T>)](http://docs.google.com/org/apache/commons/collections4/SetUtils.html#hashCodeForSet-java.util.Collection-) - Static method in class org.apache.commons.collections4.[SetUtils](http://docs.google.com/org/apache/commons/collections4/SetUtils.html)

Generates a hash code using the algorithm specified in [Set.hashCode()](https://docs.oracle.com/javase/7/docs/api/java/util/Set.html?is-external=true#hashCode--).

[HashedMap](http://docs.google.com/org/apache/commons/collections4/map/HashedMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/HashedMap.html),[V](http://docs.google.com/org/apache/commons/collections4/map/HashedMap.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

A Map implementation that is a general purpose alternative to HashMap.

[HashedMap()](http://docs.google.com/org/apache/commons/collections4/map/HashedMap.html#HashedMap--) - Constructor for class org.apache.commons.collections4.map.[HashedMap](http://docs.google.com/org/apache/commons/collections4/map/HashedMap.html)

Constructs a new empty map with default size and load factor.

[HashedMap(int)](http://docs.google.com/org/apache/commons/collections4/map/HashedMap.html#HashedMap-int-) - Constructor for class org.apache.commons.collections4.map.[HashedMap](http://docs.google.com/org/apache/commons/collections4/map/HashedMap.html)

Constructs a new, empty map with the specified initial capacity.

[HashedMap(int, float)](http://docs.google.com/org/apache/commons/collections4/map/HashedMap.html#HashedMap-int-float-) - Constructor for class org.apache.commons.collections4.map.[HashedMap](http://docs.google.com/org/apache/commons/collections4/map/HashedMap.html)

Constructs a new, empty map with the specified initial capacity and load factor.

[HashedMap(Map<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/HashedMap.html#HashedMap-java.util.Map-) - Constructor for class org.apache.commons.collections4.map.[HashedMap](http://docs.google.com/org/apache/commons/collections4/map/HashedMap.html)

Constructor copying elements from another map.

[HashEntry(AbstractHashedMap.HashEntry<K, V>, int, Object, V)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html#HashEntry-org.apache.commons.collections4.map.AbstractHashedMap.HashEntry-int-java.lang.Object-V-) - Constructor for class org.apache.commons.collections4.map.[AbstractHashedMap.HashEntry](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html)   [hashEntry(Object, Object)](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html#hashEntry-java.lang.Object-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[AbstractReferenceMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html)

Gets the hash code for a MapEntry.

[hashEntry(Object, Object)](http://docs.google.com/org/apache/commons/collections4/map/ReferenceIdentityMap.html#hashEntry-java.lang.Object-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[ReferenceIdentityMap](http://docs.google.com/org/apache/commons/collections4/map/ReferenceIdentityMap.html)

Gets the hash code for a MapEntry.

[hashIndex(int, int)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#hashIndex-int-int-) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Gets the index into the data storage for the hashCode specified.

[HashIterator(AbstractHashedMap<K, V>)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashIterator.html#HashIterator-org.apache.commons.collections4.map.AbstractHashedMap-) - Constructor for class org.apache.commons.collections4.map.[AbstractHashedMap.HashIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashIterator.html)   [HashMapIterator(AbstractHashedMap<K, V>)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashMapIterator.html#HashMapIterator-org.apache.commons.collections4.map.AbstractHashedMap-) - Constructor for class org.apache.commons.collections4.map.[AbstractHashedMap.HashMapIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashMapIterator.html)   [HashMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/HashMultiSet.html)<[E](http://docs.google.com/org/apache/commons/collections4/multiset/HashMultiSet.html)> - Class in [org.apache.commons.collections4.multiset](http://docs.google.com/org/apache/commons/collections4/multiset/package-summary.html)

Implements MultiSet, using a [HashMap](https://docs.oracle.com/javase/7/docs/api/java/util/HashMap.html?is-external=true) to provide the data storage.

[HashMultiSet()](http://docs.google.com/org/apache/commons/collections4/multiset/HashMultiSet.html#HashMultiSet--) - Constructor for class org.apache.commons.collections4.multiset.[HashMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/HashMultiSet.html)

Constructs an empty [HashMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/HashMultiSet.html).

[HashMultiSet(Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/multiset/HashMultiSet.html#HashMultiSet-java.util.Collection-) - Constructor for class org.apache.commons.collections4.multiset.[HashMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/HashMultiSet.html)

Constructs a multiset containing all the members of the given collection.

[hashSet(E...)](http://docs.google.com/org/apache/commons/collections4/SetUtils.html#hashSet-E...-) - Static method in class org.apache.commons.collections4.[SetUtils](http://docs.google.com/org/apache/commons/collections4/SetUtils.html)

Creates a set from the given items.

[HashSetValuedHashMap](http://docs.google.com/org/apache/commons/collections4/multimap/HashSetValuedHashMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/multimap/HashSetValuedHashMap.html),[V](http://docs.google.com/org/apache/commons/collections4/multimap/HashSetValuedHashMap.html)> - Class in [org.apache.commons.collections4.multimap](http://docs.google.com/org/apache/commons/collections4/multimap/package-summary.html)

Implements a SetValuedMap, using a [HashMap](https://docs.oracle.com/javase/7/docs/api/java/util/HashMap.html?is-external=true) to provide data storage and [HashSet](https://docs.oracle.com/javase/7/docs/api/java/util/HashSet.html?is-external=true)s as value collections.

[HashSetValuedHashMap()](http://docs.google.com/org/apache/commons/collections4/multimap/HashSetValuedHashMap.html#HashSetValuedHashMap--) - Constructor for class org.apache.commons.collections4.multimap.[HashSetValuedHashMap](http://docs.google.com/org/apache/commons/collections4/multimap/HashSetValuedHashMap.html)

Creates an empty HashSetValuedHashMap with the default initial map capacity (16) and the default initial set capacity (3).

[HashSetValuedHashMap(int)](http://docs.google.com/org/apache/commons/collections4/multimap/HashSetValuedHashMap.html#HashSetValuedHashMap-int-) - Constructor for class org.apache.commons.collections4.multimap.[HashSetValuedHashMap](http://docs.google.com/org/apache/commons/collections4/multimap/HashSetValuedHashMap.html)

Creates an empty HashSetValuedHashMap with the default initial map capacity (16) and the specified initial set capacity.

[HashSetValuedHashMap(int, int)](http://docs.google.com/org/apache/commons/collections4/multimap/HashSetValuedHashMap.html#HashSetValuedHashMap-int-int-) - Constructor for class org.apache.commons.collections4.multimap.[HashSetValuedHashMap](http://docs.google.com/org/apache/commons/collections4/multimap/HashSetValuedHashMap.html)

Creates an empty HashSetValuedHashMap with the specified initial map and list capacities.

[HashSetValuedHashMap(MultiValuedMap<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/multimap/HashSetValuedHashMap.html#HashSetValuedHashMap-org.apache.commons.collections4.MultiValuedMap-) - Constructor for class org.apache.commons.collections4.multimap.[HashSetValuedHashMap](http://docs.google.com/org/apache/commons/collections4/multimap/HashSetValuedHashMap.html)

Creates an HashSetValuedHashMap copying all the mappings of the given map.

[HashSetValuedHashMap(Map<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/multimap/HashSetValuedHashMap.html#HashSetValuedHashMap-java.util.Map-) - Constructor for class org.apache.commons.collections4.multimap.[HashSetValuedHashMap](http://docs.google.com/org/apache/commons/collections4/multimap/HashSetValuedHashMap.html)

Creates an HashSetValuedHashMap copying all the mappings of the given map.

[hasMoreElements()](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorEnumeration.html#hasMoreElements--) - Method in class org.apache.commons.collections4.iterators.[IteratorEnumeration](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorEnumeration.html)

Returns true if the underlying iterator has more elements.

[hasNext()](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.BidiMapIterator.html#hasNext--) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.BidiMapIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.BidiMapIterator.html)   [hasNext()](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.BidiOrderedMapIterator.html#hasNext--) - Method in class org.apache.commons.collections4.bidimap.[DualTreeBidiMap.BidiOrderedMapIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.BidiOrderedMapIterator.html)   [hasNext()](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractListIteratorDecorator.html#hasNext--) - Method in class org.apache.commons.collections4.iterators.[AbstractListIteratorDecorator](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractListIteratorDecorator.html) [hasNext()](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractMapIteratorDecorator.html#hasNext--) - Method in class org.apache.commons.collections4.iterators.[AbstractMapIteratorDecorator](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractMapIteratorDecorator.html)

Checks to see if there are more entries still to be iterated.

[hasNext()](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractOrderedMapIteratorDecorator.html#hasNext--) - Method in class org.apache.commons.collections4.iterators.[AbstractOrderedMapIteratorDecorator](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractOrderedMapIteratorDecorator.html)

Checks to see if there are more entries still to be iterated.

[hasNext()](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractUntypedIteratorDecorator.html#hasNext--) - Method in class org.apache.commons.collections4.iterators.[AbstractUntypedIteratorDecorator](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractUntypedIteratorDecorator.html)   [hasNext()](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayIterator.html#hasNext--) - Method in class org.apache.commons.collections4.iterators.[ArrayIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayIterator.html)

Returns true if there are more elements to return from the array.

[hasNext()](http://docs.google.com/org/apache/commons/collections4/iterators/BoundedIterator.html#hasNext--) - Method in class org.apache.commons.collections4.iterators.[BoundedIterator](http://docs.google.com/org/apache/commons/collections4/iterators/BoundedIterator.html)   [hasNext()](http://docs.google.com/org/apache/commons/collections4/iterators/CollatingIterator.html#hasNext--) - Method in class org.apache.commons.collections4.iterators.[CollatingIterator](http://docs.google.com/org/apache/commons/collections4/iterators/CollatingIterator.html)

Returns true if any child iterator has remaining elements.

[hasNext()](http://docs.google.com/org/apache/commons/collections4/iterators/EntrySetMapIterator.html#hasNext--) - Method in class org.apache.commons.collections4.iterators.[EntrySetMapIterator](http://docs.google.com/org/apache/commons/collections4/iterators/EntrySetMapIterator.html)

Checks to see if there are more entries still to be iterated.

[hasNext()](http://docs.google.com/org/apache/commons/collections4/iterators/EnumerationIterator.html#hasNext--) - Method in class org.apache.commons.collections4.iterators.[EnumerationIterator](http://docs.google.com/org/apache/commons/collections4/iterators/EnumerationIterator.html)

Returns true if the underlying enumeration has more elements.

[hasNext()](http://docs.google.com/org/apache/commons/collections4/iterators/FilterIterator.html#hasNext--) - Method in class org.apache.commons.collections4.iterators.[FilterIterator](http://docs.google.com/org/apache/commons/collections4/iterators/FilterIterator.html)

Returns true if the underlying iterator contains an object that matches the predicate.

[hasNext()](http://docs.google.com/org/apache/commons/collections4/iterators/FilterListIterator.html#hasNext--) - Method in class org.apache.commons.collections4.iterators.[FilterListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/FilterListIterator.html)   [hasNext()](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorChain.html#hasNext--) - Method in class org.apache.commons.collections4.iterators.[IteratorChain](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorChain.html)

Return true if any Iterator in the IteratorChain has a remaining element.

[hasNext()](http://docs.google.com/org/apache/commons/collections4/iterators/LazyIteratorChain.html#hasNext--) - Method in class org.apache.commons.collections4.iterators.[LazyIteratorChain](http://docs.google.com/org/apache/commons/collections4/iterators/LazyIteratorChain.html)

Return true if any Iterator in the chain has a remaining element.

[hasNext()](http://docs.google.com/org/apache/commons/collections4/iterators/ListIteratorWrapper.html#hasNext--) - Method in class org.apache.commons.collections4.iterators.[ListIteratorWrapper](http://docs.google.com/org/apache/commons/collections4/iterators/ListIteratorWrapper.html)

Returns true if there are more elements in the iterator.

[hasNext()](http://docs.google.com/org/apache/commons/collections4/iterators/LoopingIterator.html#hasNext--) - Method in class org.apache.commons.collections4.iterators.[LoopingIterator](http://docs.google.com/org/apache/commons/collections4/iterators/LoopingIterator.html)

Has the iterator any more elements.

[hasNext()](http://docs.google.com/org/apache/commons/collections4/iterators/LoopingListIterator.html#hasNext--) - Method in class org.apache.commons.collections4.iterators.[LoopingListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/LoopingListIterator.html)

Returns whether this iterator has any more elements.

[hasNext()](http://docs.google.com/org/apache/commons/collections4/iterators/NodeListIterator.html#hasNext--) - Method in class org.apache.commons.collections4.iterators.[NodeListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/NodeListIterator.html)   [hasNext()](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayIterator.html#hasNext--) - Method in class org.apache.commons.collections4.iterators.[ObjectArrayIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayIterator.html)

Returns true if there are more elements to return from the array.

[hasNext()](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectGraphIterator.html#hasNext--) - Method in class org.apache.commons.collections4.iterators.[ObjectGraphIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectGraphIterator.html)

Checks whether there are any more elements in the iteration to obtain.

[hasNext()](http://docs.google.com/org/apache/commons/collections4/iterators/PeekingIterator.html#hasNext--) - Method in class org.apache.commons.collections4.iterators.[PeekingIterator](http://docs.google.com/org/apache/commons/collections4/iterators/PeekingIterator.html)   [hasNext()](http://docs.google.com/org/apache/commons/collections4/iterators/PermutationIterator.html#hasNext--) - Method in class org.apache.commons.collections4.iterators.[PermutationIterator](http://docs.google.com/org/apache/commons/collections4/iterators/PermutationIterator.html)

Indicates if there are more permutation available.

[hasNext()](http://docs.google.com/org/apache/commons/collections4/iterators/PushbackIterator.html#hasNext--) - Method in class org.apache.commons.collections4.iterators.[PushbackIterator](http://docs.google.com/org/apache/commons/collections4/iterators/PushbackIterator.html)   [hasNext()](http://docs.google.com/org/apache/commons/collections4/iterators/ReverseListIterator.html#hasNext--) - Method in class org.apache.commons.collections4.iterators.[ReverseListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ReverseListIterator.html)

Checks whether there is another element.

[hasNext()](http://docs.google.com/org/apache/commons/collections4/iterators/SingletonIterator.html#hasNext--) - Method in class org.apache.commons.collections4.iterators.[SingletonIterator](http://docs.google.com/org/apache/commons/collections4/iterators/SingletonIterator.html)

Is another object available from the iterator?

[hasNext()](http://docs.google.com/org/apache/commons/collections4/iterators/SingletonListIterator.html#hasNext--) - Method in class org.apache.commons.collections4.iterators.[SingletonListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/SingletonListIterator.html)

Is another object available from the iterator?

[hasNext()](http://docs.google.com/org/apache/commons/collections4/iterators/TransformIterator.html#hasNext--) - Method in class org.apache.commons.collections4.iterators.[TransformIterator](http://docs.google.com/org/apache/commons/collections4/iterators/TransformIterator.html)   [hasNext()](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableIterator.html#hasNext--) - Method in class org.apache.commons.collections4.iterators.[UnmodifiableIterator](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableIterator.html)   [hasNext()](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableListIterator.html#hasNext--) - Method in class org.apache.commons.collections4.iterators.[UnmodifiableListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableListIterator.html)   [hasNext()](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableMapIterator.html#hasNext--) - Method in class org.apache.commons.collections4.iterators.[UnmodifiableMapIterator](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableMapIterator.html)   [hasNext()](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableOrderedMapIterator.html#hasNext--) - Method in class org.apache.commons.collections4.iterators.[UnmodifiableOrderedMapIterator](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableOrderedMapIterator.html)   [hasNext()](http://docs.google.com/org/apache/commons/collections4/iterators/ZippingIterator.html#hasNext--) - Method in class org.apache.commons.collections4.iterators.[ZippingIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ZippingIterator.html)

Returns true if any child iterator has remaining elements.

[hasNext()](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedListIterator.html#hasNext--) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList.LinkedListIterator](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedListIterator.html)   [hasNext()](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedSubListIterator.html#hasNext--) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList.LinkedSubListIterator](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedSubListIterator.html)   [hasNext()](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.SubCursor.html#hasNext--) - Method in class org.apache.commons.collections4.list.[CursorableLinkedList.SubCursor](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.SubCursor.html)   [hasNext()](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashIterator.html#hasNext--) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap.HashIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashIterator.html)   [hasNext()](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkIterator.html#hasNext--) - Method in class org.apache.commons.collections4.map.[AbstractLinkedMap.LinkIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkIterator.html)   [hasNext()](http://docs.google.com/org/apache/commons/collections4/map/EntrySetToMapIteratorAdapter.html#hasNext--) - Method in class org.apache.commons.collections4.map.[EntrySetToMapIteratorAdapter](http://docs.google.com/org/apache/commons/collections4/map/EntrySetToMapIteratorAdapter.html)

Checks to see if there are more entries still to be iterated.

[hasNext()](http://docs.google.com/org/apache/commons/collections4/MapIterator.html#hasNext--) - Method in interface org.apache.commons.collections4.[MapIterator](http://docs.google.com/org/apache/commons/collections4/MapIterator.html)

Checks to see if there are more entries still to be iterated.

[hasNext()](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.EntrySetIterator.html#hasNext--) - Method in class org.apache.commons.collections4.multiset.[AbstractMapMultiSet.EntrySetIterator](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.EntrySetIterator.html)   [hasPrevious()](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.BidiOrderedMapIterator.html#hasPrevious--) - Method in class org.apache.commons.collections4.bidimap.[DualTreeBidiMap.BidiOrderedMapIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.BidiOrderedMapIterator.html)   [hasPrevious()](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractListIteratorDecorator.html#hasPrevious--) - Method in class org.apache.commons.collections4.iterators.[AbstractListIteratorDecorator](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractListIteratorDecorator.html) [hasPrevious()](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractOrderedMapIteratorDecorator.html#hasPrevious--) - Method in class org.apache.commons.collections4.iterators.[AbstractOrderedMapIteratorDecorator](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractOrderedMapIteratorDecorator.html)

Checks to see if there is a previous entry that can be iterated to.

[hasPrevious()](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayListIterator.html#hasPrevious--) - Method in class org.apache.commons.collections4.iterators.[ArrayListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayListIterator.html)

Returns true if there are previous elements to return from the array.

[hasPrevious()](http://docs.google.com/org/apache/commons/collections4/iterators/FilterListIterator.html#hasPrevious--) - Method in class org.apache.commons.collections4.iterators.[FilterListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/FilterListIterator.html)   [hasPrevious()](http://docs.google.com/org/apache/commons/collections4/iterators/ListIteratorWrapper.html#hasPrevious--) - Method in class org.apache.commons.collections4.iterators.[ListIteratorWrapper](http://docs.google.com/org/apache/commons/collections4/iterators/ListIteratorWrapper.html)

Returns true if there are previous elements in the iterator.

[hasPrevious()](http://docs.google.com/org/apache/commons/collections4/iterators/LoopingListIterator.html#hasPrevious--) - Method in class org.apache.commons.collections4.iterators.[LoopingListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/LoopingListIterator.html)

Returns whether this iterator has any more previous elements.

[hasPrevious()](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayListIterator.html#hasPrevious--) - Method in class org.apache.commons.collections4.iterators.[ObjectArrayListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayListIterator.html)

Returns true if there are previous elements to return from the array.

[hasPrevious()](http://docs.google.com/org/apache/commons/collections4/iterators/ReverseListIterator.html#hasPrevious--) - Method in class org.apache.commons.collections4.iterators.[ReverseListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ReverseListIterator.html)

Checks whether there is a previous element.

[hasPrevious()](http://docs.google.com/org/apache/commons/collections4/iterators/SingletonListIterator.html#hasPrevious--) - Method in class org.apache.commons.collections4.iterators.[SingletonListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/SingletonListIterator.html)

Is a previous object available from the iterator?

[hasPrevious()](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableListIterator.html#hasPrevious--) - Method in class org.apache.commons.collections4.iterators.[UnmodifiableListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableListIterator.html)   [hasPrevious()](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableOrderedMapIterator.html#hasPrevious--) - Method in class org.apache.commons.collections4.iterators.[UnmodifiableOrderedMapIterator](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableOrderedMapIterator.html)   [hasPrevious()](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedListIterator.html#hasPrevious--) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList.LinkedListIterator](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedListIterator.html)   [hasPrevious()](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedSubListIterator.html#hasPrevious--) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList.LinkedSubListIterator](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedSubListIterator.html)   [hasPrevious()](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.SubCursor.html#hasPrevious--) - Method in class org.apache.commons.collections4.list.[CursorableLinkedList.SubCursor](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.SubCursor.html)   [hasPrevious()](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkIterator.html#hasPrevious--) - Method in class org.apache.commons.collections4.map.[AbstractLinkedMap.LinkIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkIterator.html)   [hasPrevious()](http://docs.google.com/org/apache/commons/collections4/map/AbstractSortedMapDecorator.SortedMapIterator.html#hasPrevious--) - Method in class org.apache.commons.collections4.map.[AbstractSortedMapDecorator.SortedMapIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractSortedMapDecorator.SortedMapIterator.html)

Checks to see if there is a previous entry that can be iterated to.

[hasPrevious()](http://docs.google.com/org/apache/commons/collections4/OrderedIterator.html#hasPrevious--) - Method in interface org.apache.commons.collections4.[OrderedIterator](http://docs.google.com/org/apache/commons/collections4/OrderedIterator.html)

Checks to see if there is a previous element that can be iterated to.

[hasPrevious()](http://docs.google.com/org/apache/commons/collections4/OrderedMapIterator.html#hasPrevious--) - Method in interface org.apache.commons.collections4.[OrderedMapIterator](http://docs.google.com/org/apache/commons/collections4/OrderedMapIterator.html)

Checks to see if there is a previous entry that can be iterated to.

## [headMap(K)](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractSortedBidiMapDecorator.html#headMap-K-) - Method in class org.apache.commons.collections4.bidimap.[AbstractSortedBidiMapDecorator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractSortedBidiMapDecorator.html)   [headMap(K)](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.html#headMap-K-) - Method in class org.apache.commons.collections4.bidimap.[DualTreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.html)   [headMap(K)](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.ViewMap.html#headMap-K-) - Method in class org.apache.commons.collections4.bidimap.[DualTreeBidiMap.ViewMap](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.ViewMap.html)   [headMap(K)](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableSortedBidiMap.html#headMap-K-) - Method in class org.apache.commons.collections4.bidimap.[UnmodifiableSortedBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableSortedBidiMap.html)   [headMap(K)](http://docs.google.com/org/apache/commons/collections4/map/AbstractSortedMapDecorator.html#headMap-K-) - Method in class org.apache.commons.collections4.map.[AbstractSortedMapDecorator](http://docs.google.com/org/apache/commons/collections4/map/AbstractSortedMapDecorator.html)   [headMap(K)](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeSortedMap.html#headMap-K-) - Method in class org.apache.commons.collections4.map.[FixedSizeSortedMap](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeSortedMap.html)   [headMap(K)](http://docs.google.com/org/apache/commons/collections4/map/LazySortedMap.html#headMap-K-) - Method in class org.apache.commons.collections4.map.[LazySortedMap](http://docs.google.com/org/apache/commons/collections4/map/LazySortedMap.html)   [headMap(K)](http://docs.google.com/org/apache/commons/collections4/map/PredicatedSortedMap.html#headMap-K-) - Method in class org.apache.commons.collections4.map.[PredicatedSortedMap](http://docs.google.com/org/apache/commons/collections4/map/PredicatedSortedMap.html)   [headMap(K)](http://docs.google.com/org/apache/commons/collections4/map/TransformedSortedMap.html#headMap-K-) - Method in class org.apache.commons.collections4.map.[TransformedSortedMap](http://docs.google.com/org/apache/commons/collections4/map/TransformedSortedMap.html)   [headMap(K)](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableSortedMap.html#headMap-K-) - Method in class org.apache.commons.collections4.map.[UnmodifiableSortedMap](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableSortedMap.html)   [headMap(K)](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html#headMap-K-) - Method in class org.apache.commons.collections4.trie.[UnmodifiableTrie](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html)   [headSet(E, boolean)](http://docs.google.com/org/apache/commons/collections4/set/AbstractNavigableSetDecorator.html#headSet-E-boolean-) - Method in class org.apache.commons.collections4.set.[AbstractNavigableSetDecorator](http://docs.google.com/org/apache/commons/collections4/set/AbstractNavigableSetDecorator.html)   [headSet(E)](http://docs.google.com/org/apache/commons/collections4/set/AbstractSortedSetDecorator.html#headSet-E-) - Method in class org.apache.commons.collections4.set.[AbstractSortedSetDecorator](http://docs.google.com/org/apache/commons/collections4/set/AbstractSortedSetDecorator.html)   [headSet(E, boolean)](http://docs.google.com/org/apache/commons/collections4/set/PredicatedNavigableSet.html#headSet-E-boolean-) - Method in class org.apache.commons.collections4.set.[PredicatedNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/PredicatedNavigableSet.html)   [headSet(E)](http://docs.google.com/org/apache/commons/collections4/set/PredicatedSortedSet.html#headSet-E-) - Method in class org.apache.commons.collections4.set.[PredicatedSortedSet](http://docs.google.com/org/apache/commons/collections4/set/PredicatedSortedSet.html)   [headSet(E, boolean)](http://docs.google.com/org/apache/commons/collections4/set/TransformedNavigableSet.html#headSet-E-boolean-) - Method in class org.apache.commons.collections4.set.[TransformedNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/TransformedNavigableSet.html)   [headSet(E)](http://docs.google.com/org/apache/commons/collections4/set/TransformedSortedSet.html#headSet-E-) - Method in class org.apache.commons.collections4.set.[TransformedSortedSet](http://docs.google.com/org/apache/commons/collections4/set/TransformedSortedSet.html)   [headSet(E)](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableNavigableSet.html#headSet-E-) - Method in class org.apache.commons.collections4.set.[UnmodifiableNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableNavigableSet.html)   [headSet(E, boolean)](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableNavigableSet.html#headSet-E-boolean-) - Method in class org.apache.commons.collections4.set.[UnmodifiableNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableNavigableSet.html)   [headSet(E)](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableSortedSet.html#headSet-E-) - Method in class org.apache.commons.collections4.set.[UnmodifiableSortedSet](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableSortedSet.html)   [higher(E)](http://docs.google.com/org/apache/commons/collections4/set/AbstractNavigableSetDecorator.html#higher-E-) - Method in class org.apache.commons.collections4.set.[AbstractNavigableSetDecorator](http://docs.google.com/org/apache/commons/collections4/set/AbstractNavigableSetDecorator.html)   [higher(E)](http://docs.google.com/org/apache/commons/collections4/set/PredicatedNavigableSet.html#higher-E-) - Method in class org.apache.commons.collections4.set.[PredicatedNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/PredicatedNavigableSet.html)   [higher(E)](http://docs.google.com/org/apache/commons/collections4/set/TransformedNavigableSet.html#higher-E-) - Method in class org.apache.commons.collections4.set.[TransformedNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/TransformedNavigableSet.html)

I

[IdentityPredicate](http://docs.google.com/org/apache/commons/collections4/functors/IdentityPredicate.html)<[T](http://docs.google.com/org/apache/commons/collections4/functors/IdentityPredicate.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Predicate implementation that returns true if the input is the same object as the one stored in this predicate.

[IdentityPredicate(T)](http://docs.google.com/org/apache/commons/collections4/functors/IdentityPredicate.html#IdentityPredicate-T-) - Constructor for class org.apache.commons.collections4.functors.[IdentityPredicate](http://docs.google.com/org/apache/commons/collections4/functors/IdentityPredicate.html)

Constructor that performs no validation.

[identityPredicate(T)](http://docs.google.com/org/apache/commons/collections4/functors/IdentityPredicate.html#identityPredicate-T-) - Static method in class org.apache.commons.collections4.functors.[IdentityPredicate](http://docs.google.com/org/apache/commons/collections4/functors/IdentityPredicate.html)

Factory to create the identity predicate.

[identityPredicate(T)](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html#identityPredicate-T-) - Static method in class org.apache.commons.collections4.[PredicateUtils](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html)

Creates a Predicate that checks if the input object is equal to the specified object by identity.

[ifClosure(Predicate<? super E>, Closure<? super E>)](http://docs.google.com/org/apache/commons/collections4/ClosureUtils.html#ifClosure-org.apache.commons.collections4.Predicate-org.apache.commons.collections4.Closure-) - Static method in class org.apache.commons.collections4.[ClosureUtils](http://docs.google.com/org/apache/commons/collections4/ClosureUtils.html)

Create a new Closure that calls another closure based on the result of the specified predicate.

[ifClosure(Predicate<? super E>, Closure<? super E>, Closure<? super E>)](http://docs.google.com/org/apache/commons/collections4/ClosureUtils.html#ifClosure-org.apache.commons.collections4.Predicate-org.apache.commons.collections4.Closure-org.apache.commons.collections4.Closure-) - Static method in class org.apache.commons.collections4.[ClosureUtils](http://docs.google.com/org/apache/commons/collections4/ClosureUtils.html)

Create a new Closure that calls one of two closures depending on the specified predicate.

[IfClosure](http://docs.google.com/org/apache/commons/collections4/functors/IfClosure.html)<[E](http://docs.google.com/org/apache/commons/collections4/functors/IfClosure.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Closure implementation acts as an if statement calling one or other closure based on a predicate.

[IfClosure(Predicate<? super E>, Closure<? super E>)](http://docs.google.com/org/apache/commons/collections4/functors/IfClosure.html#IfClosure-org.apache.commons.collections4.Predicate-org.apache.commons.collections4.Closure-) - Constructor for class org.apache.commons.collections4.functors.[IfClosure](http://docs.google.com/org/apache/commons/collections4/functors/IfClosure.html)

Constructor that performs no validation.

[IfClosure(Predicate<? super E>, Closure<? super E>, Closure<? super E>)](http://docs.google.com/org/apache/commons/collections4/functors/IfClosure.html#IfClosure-org.apache.commons.collections4.Predicate-org.apache.commons.collections4.Closure-org.apache.commons.collections4.Closure-) - Constructor for class org.apache.commons.collections4.functors.[IfClosure](http://docs.google.com/org/apache/commons/collections4/functors/IfClosure.html)

Constructor that performs no validation.

[ifClosure(Predicate<? super E>, Closure<? super E>)](http://docs.google.com/org/apache/commons/collections4/functors/IfClosure.html#ifClosure-org.apache.commons.collections4.Predicate-org.apache.commons.collections4.Closure-) - Static method in class org.apache.commons.collections4.functors.[IfClosure](http://docs.google.com/org/apache/commons/collections4/functors/IfClosure.html)

Factory method that performs validation.

[ifClosure(Predicate<? super E>, Closure<? super E>, Closure<? super E>)](http://docs.google.com/org/apache/commons/collections4/functors/IfClosure.html#ifClosure-org.apache.commons.collections4.Predicate-org.apache.commons.collections4.Closure-org.apache.commons.collections4.Closure-) - Static method in class org.apache.commons.collections4.functors.[IfClosure](http://docs.google.com/org/apache/commons/collections4/functors/IfClosure.html)

Factory method that performs validation.

[IfTransformer](http://docs.google.com/org/apache/commons/collections4/functors/IfTransformer.html)<[I](http://docs.google.com/org/apache/commons/collections4/functors/IfTransformer.html),[O](http://docs.google.com/org/apache/commons/collections4/functors/IfTransformer.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Transformer implementation that will call one of two closures based on whether a predicate evaluates as true or false.

[IfTransformer(Predicate<? super I>, Transformer<? super I, ? extends O>, Transformer<? super I, ? extends O>)](http://docs.google.com/org/apache/commons/collections4/functors/IfTransformer.html#IfTransformer-org.apache.commons.collections4.Predicate-org.apache.commons.collections4.Transformer-org.apache.commons.collections4.Transformer-) - Constructor for class org.apache.commons.collections4.functors.[IfTransformer](http://docs.google.com/org/apache/commons/collections4/functors/IfTransformer.html)

Constructor that performs no validation.

[ifTransformer(Predicate<? super I>, Transformer<? super I, ? extends O>, Transformer<? super I, ? extends O>)](http://docs.google.com/org/apache/commons/collections4/functors/IfTransformer.html#ifTransformer-org.apache.commons.collections4.Predicate-org.apache.commons.collections4.Transformer-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.functors.[IfTransformer](http://docs.google.com/org/apache/commons/collections4/functors/IfTransformer.html)

Factory method that performs validation.

[ifTransformer(Predicate<? super T>, Transformer<? super T, ? extends T>)](http://docs.google.com/org/apache/commons/collections4/functors/IfTransformer.html#ifTransformer-org.apache.commons.collections4.Predicate-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.functors.[IfTransformer](http://docs.google.com/org/apache/commons/collections4/functors/IfTransformer.html)

Factory method that performs validation.

[ifTransformer(Predicate<? super T>, Transformer<? super T, ? extends T>)](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html#ifTransformer-org.apache.commons.collections4.Predicate-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.[TransformerUtils](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html)

Create a new Transformer that calls the transformer if the predicate is true, otherwise the input object is returned unchanged.

[ifTransformer(Predicate<? super I>, Transformer<? super I, ? extends O>, Transformer<? super I, ? extends O>)](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html#ifTransformer-org.apache.commons.collections4.Predicate-org.apache.commons.collections4.Transformer-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.[TransformerUtils](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html)

Create a new Transformer that calls one of two transformers depending on the specified predicate.

[IndexedCollection](http://docs.google.com/org/apache/commons/collections4/collection/IndexedCollection.html)<[K](http://docs.google.com/org/apache/commons/collections4/collection/IndexedCollection.html),[C](http://docs.google.com/org/apache/commons/collections4/collection/IndexedCollection.html)> - Class in [org.apache.commons.collections4.collection](http://docs.google.com/org/apache/commons/collections4/collection/package-summary.html)

An IndexedCollection is a Map-like view onto a Collection.

[IndexedCollection(Collection<C>, Transformer<C, K>, MultiMap<K, C>, boolean)](http://docs.google.com/org/apache/commons/collections4/collection/IndexedCollection.html#IndexedCollection-java.util.Collection-org.apache.commons.collections4.Transformer-org.apache.commons.collections4.MultiMap-boolean-) - Constructor for class org.apache.commons.collections4.collection.[IndexedCollection](http://docs.google.com/org/apache/commons/collections4/collection/IndexedCollection.html)

Create a [IndexedCollection](http://docs.google.com/org/apache/commons/collections4/collection/IndexedCollection.html).

[indexOf(Iterable<E>, Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#indexOf-java.lang.Iterable-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[IterableUtils](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html)

Returns the index of the first element in the specified iterable that matches the given predicate.

[indexOf(Iterator<E>, Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#indexOf-java.util.Iterator-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Returns the index of the first element in the specified iterator that matches the given predicate.

[indexOf(Object)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#indexOf-java.lang.Object-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)   [indexOf(Object)](http://docs.google.com/org/apache/commons/collections4/list/AbstractListDecorator.html#indexOf-java.lang.Object-) - Method in class org.apache.commons.collections4.list.[AbstractListDecorator](http://docs.google.com/org/apache/commons/collections4/list/AbstractListDecorator.html)   [indexOf(Object)](http://docs.google.com/org/apache/commons/collections4/list/FixedSizeList.html#indexOf-java.lang.Object-) - Method in class org.apache.commons.collections4.list.[FixedSizeList](http://docs.google.com/org/apache/commons/collections4/list/FixedSizeList.html)   [indexOf(Object)](http://docs.google.com/org/apache/commons/collections4/list/PredicatedList.html#indexOf-java.lang.Object-) - Method in class org.apache.commons.collections4.list.[PredicatedList](http://docs.google.com/org/apache/commons/collections4/list/PredicatedList.html)   [indexOf(Object)](http://docs.google.com/org/apache/commons/collections4/list/TransformedList.html#indexOf-java.lang.Object-) - Method in class org.apache.commons.collections4.list.[TransformedList](http://docs.google.com/org/apache/commons/collections4/list/TransformedList.html)   [indexOf(Object)](http://docs.google.com/org/apache/commons/collections4/list/TreeList.html#indexOf-java.lang.Object-) - Method in class org.apache.commons.collections4.list.[TreeList](http://docs.google.com/org/apache/commons/collections4/list/TreeList.html)

Searches for the index of an object in the list.

[indexOf(List<E>, Predicate<E>)](http://docs.google.com/org/apache/commons/collections4/ListUtils.html#indexOf-java.util.List-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[ListUtils](http://docs.google.com/org/apache/commons/collections4/ListUtils.html)

Finds the first index in the given List which matches the given predicate.

[indexOf(Object)](http://docs.google.com/org/apache/commons/collections4/map/LinkedMap.html#indexOf-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[LinkedMap](http://docs.google.com/org/apache/commons/collections4/map/LinkedMap.html)

Gets the index of the specified key.

[indexOf(Object)](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html#indexOf-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[ListOrderedMap](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html)

Gets the index of the specified key.

[indexOf(Object)](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html#indexOf-java.lang.Object-) - Method in class org.apache.commons.collections4.set.[ListOrderedSet](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html)

Returns the index of the first occurrence of the specified element in ordered set.

[init()](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#init--) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)

The equivalent of a default constructor, broken out so it can be called by any constructor and by readObject.

[init()](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.html#init--) - Method in class org.apache.commons.collections4.list.[CursorableLinkedList](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.html)

The equivalent of a default constructor called by any constructor and by readObject.

[init()](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#init--) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Initialise subclasses during construction, cloning or deserialization.

[init()](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html#init--) - Method in class org.apache.commons.collections4.map.[AbstractLinkedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html)

Initialise this subclass during construction.

[init()](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html#init--) - Method in class org.apache.commons.collections4.map.[AbstractReferenceMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html)

Initialise this subclass during construction, cloning or deserialization.

[InsertCommand](http://docs.google.com/org/apache/commons/collections4/sequence/InsertCommand.html)<[T](http://docs.google.com/org/apache/commons/collections4/sequence/InsertCommand.html)> - Class in [org.apache.commons.collections4.sequence](http://docs.google.com/org/apache/commons/collections4/sequence/package-summary.html)

Command representing the insertion of one object of the second sequence.

[InsertCommand(T)](http://docs.google.com/org/apache/commons/collections4/sequence/InsertCommand.html#InsertCommand-T-) - Constructor for class org.apache.commons.collections4.sequence.[InsertCommand](http://docs.google.com/org/apache/commons/collections4/sequence/InsertCommand.html)

Simple constructor.

[INSTANCE](http://docs.google.com/org/apache/commons/collections4/comparators/ComparableComparator.html#INSTANCE) - Static variable in class org.apache.commons.collections4.comparators.[ComparableComparator](http://docs.google.com/org/apache/commons/collections4/comparators/ComparableComparator.html)

The singleton instance.

[INSTANCE](http://docs.google.com/org/apache/commons/collections4/functors/CloneTransformer.html#INSTANCE) - Static variable in class org.apache.commons.collections4.functors.[CloneTransformer](http://docs.google.com/org/apache/commons/collections4/functors/CloneTransformer.html)

Singleton predicate instance

[INSTANCE](http://docs.google.com/org/apache/commons/collections4/functors/DefaultEquator.html#INSTANCE) - Static variable in class org.apache.commons.collections4.functors.[DefaultEquator](http://docs.google.com/org/apache/commons/collections4/functors/DefaultEquator.html)

Static instance

[INSTANCE](http://docs.google.com/org/apache/commons/collections4/functors/ExceptionClosure.html#INSTANCE) - Static variable in class org.apache.commons.collections4.functors.[ExceptionClosure](http://docs.google.com/org/apache/commons/collections4/functors/ExceptionClosure.html)

Singleton predicate instance

[INSTANCE](http://docs.google.com/org/apache/commons/collections4/functors/ExceptionFactory.html#INSTANCE) - Static variable in class org.apache.commons.collections4.functors.[ExceptionFactory](http://docs.google.com/org/apache/commons/collections4/functors/ExceptionFactory.html)

Singleton predicate instance

[INSTANCE](http://docs.google.com/org/apache/commons/collections4/functors/ExceptionPredicate.html#INSTANCE) - Static variable in class org.apache.commons.collections4.functors.[ExceptionPredicate](http://docs.google.com/org/apache/commons/collections4/functors/ExceptionPredicate.html)

Singleton predicate instance

[INSTANCE](http://docs.google.com/org/apache/commons/collections4/functors/ExceptionTransformer.html#INSTANCE) - Static variable in class org.apache.commons.collections4.functors.[ExceptionTransformer](http://docs.google.com/org/apache/commons/collections4/functors/ExceptionTransformer.html)

Singleton predicate instance

[INSTANCE](http://docs.google.com/org/apache/commons/collections4/functors/FalsePredicate.html#INSTANCE) - Static variable in class org.apache.commons.collections4.functors.[FalsePredicate](http://docs.google.com/org/apache/commons/collections4/functors/FalsePredicate.html)

Singleton predicate instance

[INSTANCE](http://docs.google.com/org/apache/commons/collections4/functors/NOPClosure.html#INSTANCE) - Static variable in class org.apache.commons.collections4.functors.[NOPClosure](http://docs.google.com/org/apache/commons/collections4/functors/NOPClosure.html)

Singleton predicate instance

[INSTANCE](http://docs.google.com/org/apache/commons/collections4/functors/NOPTransformer.html#INSTANCE) - Static variable in class org.apache.commons.collections4.functors.[NOPTransformer](http://docs.google.com/org/apache/commons/collections4/functors/NOPTransformer.html)

Singleton predicate instance

[INSTANCE](http://docs.google.com/org/apache/commons/collections4/functors/NotNullPredicate.html#INSTANCE) - Static variable in class org.apache.commons.collections4.functors.[NotNullPredicate](http://docs.google.com/org/apache/commons/collections4/functors/NotNullPredicate.html)

Singleton predicate instance

[INSTANCE](http://docs.google.com/org/apache/commons/collections4/functors/NullPredicate.html#INSTANCE) - Static variable in class org.apache.commons.collections4.functors.[NullPredicate](http://docs.google.com/org/apache/commons/collections4/functors/NullPredicate.html)

Singleton predicate instance

[INSTANCE](http://docs.google.com/org/apache/commons/collections4/functors/TruePredicate.html#INSTANCE) - Static variable in class org.apache.commons.collections4.functors.[TruePredicate](http://docs.google.com/org/apache/commons/collections4/functors/TruePredicate.html)

Singleton predicate instance

[INSTANCE](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyIterator.html#INSTANCE) - Static variable in class org.apache.commons.collections4.iterators.[EmptyIterator](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyIterator.html)

Singleton instance of the iterator.

[INSTANCE](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyListIterator.html#INSTANCE) - Static variable in class org.apache.commons.collections4.iterators.[EmptyListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyListIterator.html)

Singleton instance of the iterator.

[INSTANCE](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyMapIterator.html#INSTANCE) - Static variable in class org.apache.commons.collections4.iterators.[EmptyMapIterator](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyMapIterator.html)

Singleton instance of the iterator.

[INSTANCE](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyOrderedIterator.html#INSTANCE) - Static variable in class org.apache.commons.collections4.iterators.[EmptyOrderedIterator](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyOrderedIterator.html)

Singleton instance of the iterator.

[INSTANCE](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyOrderedMapIterator.html#INSTANCE) - Static variable in class org.apache.commons.collections4.iterators.[EmptyOrderedMapIterator](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyOrderedMapIterator.html)

Singleton instance of the iterator.

[INSTANCE](http://docs.google.com/org/apache/commons/collections4/properties/PropertiesFactory.html#INSTANCE) - Static variable in class org.apache.commons.collections4.properties.[PropertiesFactory](http://docs.google.com/org/apache/commons/collections4/properties/PropertiesFactory.html)

The singleton instance.

[INSTANCE](http://docs.google.com/org/apache/commons/collections4/properties/SortedPropertiesFactory.html#INSTANCE) - Static variable in class org.apache.commons.collections4.properties.[SortedPropertiesFactory](http://docs.google.com/org/apache/commons/collections4/properties/SortedPropertiesFactory.html)

The singleton instance.

[INSTANCE](http://docs.google.com/org/apache/commons/collections4/trie/analyzer/StringKeyAnalyzer.html#INSTANCE) - Static variable in class org.apache.commons.collections4.trie.analyzer.[StringKeyAnalyzer](http://docs.google.com/org/apache/commons/collections4/trie/analyzer/StringKeyAnalyzer.html)

A singleton instance of [StringKeyAnalyzer](http://docs.google.com/org/apache/commons/collections4/trie/analyzer/StringKeyAnalyzer.html).

[InstanceofPredicate](http://docs.google.com/org/apache/commons/collections4/functors/InstanceofPredicate.html) - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Predicate implementation that returns true if the input is an instanceof the type stored in this predicate.

[InstanceofPredicate(Class<?>)](http://docs.google.com/org/apache/commons/collections4/functors/InstanceofPredicate.html#InstanceofPredicate-java.lang.Class-) - Constructor for class org.apache.commons.collections4.functors.[InstanceofPredicate](http://docs.google.com/org/apache/commons/collections4/functors/InstanceofPredicate.html)

Constructor that performs no validation.

[instanceOfPredicate(Class<?>)](http://docs.google.com/org/apache/commons/collections4/functors/InstanceofPredicate.html#instanceOfPredicate-java.lang.Class-) - Static method in class org.apache.commons.collections4.functors.[InstanceofPredicate](http://docs.google.com/org/apache/commons/collections4/functors/InstanceofPredicate.html)

Factory to create the identity predicate.

[instanceofPredicate(Class<?>)](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html#instanceofPredicate-java.lang.Class-) - Static method in class org.apache.commons.collections4.[PredicateUtils](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html)

Creates a Predicate that checks if the object passed in is of a particular type, using instanceof.

[instantiateFactory(Class<T>)](http://docs.google.com/org/apache/commons/collections4/FactoryUtils.html#instantiateFactory-java.lang.Class-) - Static method in class org.apache.commons.collections4.[FactoryUtils](http://docs.google.com/org/apache/commons/collections4/FactoryUtils.html)

Creates a Factory that can create objects of a specific type using a no-args constructor.

[instantiateFactory(Class<T>, Class<?>[], Object[])](http://docs.google.com/org/apache/commons/collections4/FactoryUtils.html#instantiateFactory-java.lang.Class-java.lang.Class:A-java.lang.Object:A-) - Static method in class org.apache.commons.collections4.[FactoryUtils](http://docs.google.com/org/apache/commons/collections4/FactoryUtils.html)

Creates a Factory that can create objects of a specific type using the arguments specified to this method.

[InstantiateFactory](http://docs.google.com/org/apache/commons/collections4/functors/InstantiateFactory.html)<[T](http://docs.google.com/org/apache/commons/collections4/functors/InstantiateFactory.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Factory implementation that creates a new object instance by reflection.

[InstantiateFactory(Class<T>)](http://docs.google.com/org/apache/commons/collections4/functors/InstantiateFactory.html#InstantiateFactory-java.lang.Class-) - Constructor for class org.apache.commons.collections4.functors.[InstantiateFactory](http://docs.google.com/org/apache/commons/collections4/functors/InstantiateFactory.html)

Constructor that performs no validation.

[InstantiateFactory(Class<T>, Class<?>[], Object[])](http://docs.google.com/org/apache/commons/collections4/functors/InstantiateFactory.html#InstantiateFactory-java.lang.Class-java.lang.Class:A-java.lang.Object:A-) - Constructor for class org.apache.commons.collections4.functors.[InstantiateFactory](http://docs.google.com/org/apache/commons/collections4/functors/InstantiateFactory.html)

Constructor that performs no validation.

[instantiateFactory(Class<T>, Class<?>[], Object[])](http://docs.google.com/org/apache/commons/collections4/functors/InstantiateFactory.html#instantiateFactory-java.lang.Class-java.lang.Class:A-java.lang.Object:A-) - Static method in class org.apache.commons.collections4.functors.[InstantiateFactory](http://docs.google.com/org/apache/commons/collections4/functors/InstantiateFactory.html)

Factory method that performs validation.

[InstantiateTransformer](http://docs.google.com/org/apache/commons/collections4/functors/InstantiateTransformer.html)<[T](http://docs.google.com/org/apache/commons/collections4/functors/InstantiateTransformer.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Transformer implementation that creates a new object instance by reflection.

[InstantiateTransformer(Class<?>[], Object[])](http://docs.google.com/org/apache/commons/collections4/functors/InstantiateTransformer.html#InstantiateTransformer-java.lang.Class:A-java.lang.Object:A-) - Constructor for class org.apache.commons.collections4.functors.[InstantiateTransformer](http://docs.google.com/org/apache/commons/collections4/functors/InstantiateTransformer.html)

Constructor that performs no validation.

[instantiateTransformer()](http://docs.google.com/org/apache/commons/collections4/functors/InstantiateTransformer.html#instantiateTransformer--) - Static method in class org.apache.commons.collections4.functors.[InstantiateTransformer](http://docs.google.com/org/apache/commons/collections4/functors/InstantiateTransformer.html)

Get a typed no-arg instance.

[instantiateTransformer(Class<?>[], Object[])](http://docs.google.com/org/apache/commons/collections4/functors/InstantiateTransformer.html#instantiateTransformer-java.lang.Class:A-java.lang.Object:A-) - Static method in class org.apache.commons.collections4.functors.[InstantiateTransformer](http://docs.google.com/org/apache/commons/collections4/functors/InstantiateTransformer.html)

Transformer method that performs validation.

[instantiateTransformer()](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html#instantiateTransformer--) - Static method in class org.apache.commons.collections4.[TransformerUtils](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html)

Gets a Transformer that expects an input Class object that it will instantiate.

[instantiateTransformer(Class<?>[], Object[])](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html#instantiateTransformer-java.lang.Class:A-java.lang.Object:A-) - Static method in class org.apache.commons.collections4.[TransformerUtils](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html)

Creates a Transformer that expects an input Class object that it will instantiate.

[intersection(Iterable<? extends O>, Iterable<? extends O>)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#intersection-java.lang.Iterable-java.lang.Iterable-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Returns a [Collection](https://docs.oracle.com/javase/7/docs/api/java/util/Collection.html?is-external=true) containing the intersection of the given [Iterable](https://docs.oracle.com/javase/7/docs/api/java/lang/Iterable.html?is-external=true)s.

[intersection(List<? extends E>, List<? extends E>)](http://docs.google.com/org/apache/commons/collections4/ListUtils.html#intersection-java.util.List-java.util.List-) - Static method in class org.apache.commons.collections4.[ListUtils](http://docs.google.com/org/apache/commons/collections4/ListUtils.html)

Returns a new list containing all elements that are contained in both given lists.

[intersection(Set<? extends E>, Set<? extends E>)](http://docs.google.com/org/apache/commons/collections4/SetUtils.html#intersection-java.util.Set-java.util.Set-) - Static method in class org.apache.commons.collections4.[SetUtils](http://docs.google.com/org/apache/commons/collections4/SetUtils.html)

Returns a unmodifiable **view** of the intersection of the given [Set](https://docs.oracle.com/javase/7/docs/api/java/util/Set.html?is-external=true)s.

[inverseBidiMap()](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractBidiMapDecorator.html#inverseBidiMap--) - Method in class org.apache.commons.collections4.bidimap.[AbstractBidiMapDecorator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractBidiMapDecorator.html)   [inverseBidiMap()](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html#inverseBidiMap--) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html)   [inverseBidiMap()](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractOrderedBidiMapDecorator.html#inverseBidiMap--) - Method in class org.apache.commons.collections4.bidimap.[AbstractOrderedBidiMapDecorator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractOrderedBidiMapDecorator.html)   [inverseBidiMap()](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractSortedBidiMapDecorator.html#inverseBidiMap--) - Method in class org.apache.commons.collections4.bidimap.[AbstractSortedBidiMapDecorator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractSortedBidiMapDecorator.html)   [inverseBidiMap()](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.html#inverseBidiMap--) - Method in class org.apache.commons.collections4.bidimap.[DualTreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.html)   [inverseBidiMap()](http://docs.google.com/org/apache/commons/collections4/BidiMap.html#inverseBidiMap--) - Method in interface org.apache.commons.collections4.[BidiMap](http://docs.google.com/org/apache/commons/collections4/BidiMap.html)

Gets a view of this map where the keys and values are reversed.

[inverseBidiMap()](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html#inverseBidiMap--) - Method in class org.apache.commons.collections4.bidimap.[TreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html)

Gets the inverse map for comparison.

[inverseBidiMap()](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableBidiMap.html#inverseBidiMap--) - Method in class org.apache.commons.collections4.bidimap.[UnmodifiableBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableBidiMap.html)   [inverseBidiMap()](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableOrderedBidiMap.html#inverseBidiMap--) - Method in class org.apache.commons.collections4.bidimap.[UnmodifiableOrderedBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableOrderedBidiMap.html)   [inverseBidiMap()](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableSortedBidiMap.html#inverseBidiMap--) - Method in class org.apache.commons.collections4.bidimap.[UnmodifiableSortedBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableSortedBidiMap.html)   [inverseBidiMap()](http://docs.google.com/org/apache/commons/collections4/OrderedBidiMap.html#inverseBidiMap--) - Method in interface org.apache.commons.collections4.[OrderedBidiMap](http://docs.google.com/org/apache/commons/collections4/OrderedBidiMap.html)

Gets a view of this map where the keys and values are reversed.

[inverseBidiMap()](http://docs.google.com/org/apache/commons/collections4/SortedBidiMap.html#inverseBidiMap--) - Method in interface org.apache.commons.collections4.[SortedBidiMap](http://docs.google.com/org/apache/commons/collections4/SortedBidiMap.html)

Gets a view of this map where the keys and values are reversed.

[inverseOrderedBidiMap()](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.html#inverseOrderedBidiMap--) - Method in class org.apache.commons.collections4.bidimap.[DualTreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.html)   [inverseOrderedBidiMap()](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableOrderedBidiMap.html#inverseOrderedBidiMap--) - Method in class org.apache.commons.collections4.bidimap.[UnmodifiableOrderedBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableOrderedBidiMap.html)

Gets an unmodifiable view of this map where the keys and values are reversed.

[inverseSortedBidiMap()](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.html#inverseSortedBidiMap--) - Method in class org.apache.commons.collections4.bidimap.[DualTreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.html)   [invertMap(Map<K, V>)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#invertMap-java.util.Map-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Inverts the supplied map returning a new HashMap such that the keys of the input are swapped with the values.

[invokerClosure(String)](http://docs.google.com/org/apache/commons/collections4/ClosureUtils.html#invokerClosure-java.lang.String-) - Static method in class org.apache.commons.collections4.[ClosureUtils](http://docs.google.com/org/apache/commons/collections4/ClosureUtils.html)

Creates a Closure that will invoke a specific method on the closure's input object by reflection.

[invokerClosure(String, Class<?>[], Object[])](http://docs.google.com/org/apache/commons/collections4/ClosureUtils.html#invokerClosure-java.lang.String-java.lang.Class:A-java.lang.Object:A-) - Static method in class org.apache.commons.collections4.[ClosureUtils](http://docs.google.com/org/apache/commons/collections4/ClosureUtils.html)

Creates a Closure that will invoke a specific method on the closure's input object by reflection.

[invokerPredicate(String)](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html#invokerPredicate-java.lang.String-) - Static method in class org.apache.commons.collections4.[PredicateUtils](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html)

Creates a Predicate that invokes a method on the input object.

[invokerPredicate(String, Class<?>[], Object[])](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html#invokerPredicate-java.lang.String-java.lang.Class:A-java.lang.Object:A-) - Static method in class org.apache.commons.collections4.[PredicateUtils](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html)

Creates a Predicate that invokes a method on the input object.

[InvokerTransformer](http://docs.google.com/org/apache/commons/collections4/functors/InvokerTransformer.html)<[I](http://docs.google.com/org/apache/commons/collections4/functors/InvokerTransformer.html),[O](http://docs.google.com/org/apache/commons/collections4/functors/InvokerTransformer.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Transformer implementation that creates a new object instance by reflection.

[InvokerTransformer(String, Class<?>[], Object[])](http://docs.google.com/org/apache/commons/collections4/functors/InvokerTransformer.html#InvokerTransformer-java.lang.String-java.lang.Class:A-java.lang.Object:A-) - Constructor for class org.apache.commons.collections4.functors.[InvokerTransformer](http://docs.google.com/org/apache/commons/collections4/functors/InvokerTransformer.html)

Constructor that performs no validation.

[invokerTransformer(String)](http://docs.google.com/org/apache/commons/collections4/functors/InvokerTransformer.html#invokerTransformer-java.lang.String-) - Static method in class org.apache.commons.collections4.functors.[InvokerTransformer](http://docs.google.com/org/apache/commons/collections4/functors/InvokerTransformer.html)

Gets an instance of this transformer calling a specific method with no arguments.

[invokerTransformer(String, Class<?>[], Object[])](http://docs.google.com/org/apache/commons/collections4/functors/InvokerTransformer.html#invokerTransformer-java.lang.String-java.lang.Class:A-java.lang.Object:A-) - Static method in class org.apache.commons.collections4.functors.[InvokerTransformer](http://docs.google.com/org/apache/commons/collections4/functors/InvokerTransformer.html)

Gets an instance of this transformer calling a specific method with specific values.

[invokerTransformer(String)](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html#invokerTransformer-java.lang.String-) - Static method in class org.apache.commons.collections4.[TransformerUtils](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html)

Gets a Transformer that invokes a method on the input object.

[invokerTransformer(String, Class<?>[], Object[])](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html#invokerTransformer-java.lang.String-java.lang.Class:A-java.lang.Object:A-) - Static method in class org.apache.commons.collections4.[TransformerUtils](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html)

Gets a Transformer that invokes a method on the input object.

[iPredicates](http://docs.google.com/org/apache/commons/collections4/functors/AbstractQuantifierPredicate.html#iPredicates) - Variable in class org.apache.commons.collections4.functors.[AbstractQuantifierPredicate](http://docs.google.com/org/apache/commons/collections4/functors/AbstractQuantifierPredicate.html)

The array of predicates to call

[isAtFullCapacity()](http://docs.google.com/org/apache/commons/collections4/queue/CircularFifoQueue.html#isAtFullCapacity--) - Method in class org.apache.commons.collections4.queue.[CircularFifoQueue](http://docs.google.com/org/apache/commons/collections4/queue/CircularFifoQueue.html)

Returns true if the capacity limit of this queue has been reached, i.e.

[isBitSet(String, int, int)](http://docs.google.com/org/apache/commons/collections4/trie/analyzer/StringKeyAnalyzer.html#isBitSet-java.lang.String-int-int-) - Method in class org.apache.commons.collections4.trie.analyzer.[StringKeyAnalyzer](http://docs.google.com/org/apache/commons/collections4/trie/analyzer/StringKeyAnalyzer.html)   [isBitSet(K, int, int)](http://docs.google.com/org/apache/commons/collections4/trie/KeyAnalyzer.html#isBitSet-K-int-int-) - Method in class org.apache.commons.collections4.trie.[KeyAnalyzer](http://docs.google.com/org/apache/commons/collections4/trie/KeyAnalyzer.html)

Returns whether or not a bit is set.

[isCacheFull()](http://docs.google.com/org/apache/commons/collections4/list/NodeCachingLinkedList.html#isCacheFull--) - Method in class org.apache.commons.collections4.list.[NodeCachingLinkedList](http://docs.google.com/org/apache/commons/collections4/list/NodeCachingLinkedList.html)

Checks whether the cache is full.

[isDoLoop()](http://docs.google.com/org/apache/commons/collections4/functors/WhileClosure.html#isDoLoop--) - Method in class org.apache.commons.collections4.functors.[WhileClosure](http://docs.google.com/org/apache/commons/collections4/functors/WhileClosure.html)

Is the loop a do-while loop.

[isEmpty()](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html#isEmpty--) - Method in class org.apache.commons.collections4.bag.[AbstractMapBag](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html)

Returns true if the underlying map is empty.

[isEmpty()](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html#isEmpty--) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html)   [isEmpty()](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html#isEmpty--) - Method in class org.apache.commons.collections4.bidimap.[TreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html)

Checks whether the map is empty or not.

[isEmpty()](http://docs.google.com/org/apache/commons/collections4/collection/AbstractCollectionDecorator.html#isEmpty--) - Method in class org.apache.commons.collections4.collection.[AbstractCollectionDecorator](http://docs.google.com/org/apache/commons/collections4/collection/AbstractCollectionDecorator.html)   [isEmpty()](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html#isEmpty--) - Method in class org.apache.commons.collections4.collection.[CompositeCollection](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html)

Checks whether this composite collection is empty.

[isEmpty()](http://docs.google.com/org/apache/commons/collections4/collection/SynchronizedCollection.html#isEmpty--) - Method in class org.apache.commons.collections4.collection.[SynchronizedCollection](http://docs.google.com/org/apache/commons/collections4/collection/SynchronizedCollection.html)   [isEmpty(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#isEmpty-java.util.Collection-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Null-safe check if the specified collection is empty.

[isEmpty()](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html#isEmpty--) - Method in class org.apache.commons.collections4.[FluentIterable](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html)

Checks if this iterable is empty.

[isEmpty()](http://docs.google.com/org/apache/commons/collections4/Get.html#isEmpty--) - Method in interface org.apache.commons.collections4.[Get](http://docs.google.com/org/apache/commons/collections4/Get.html)   [isEmpty(Iterable<?>)](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#isEmpty-java.lang.Iterable-) - Static method in class org.apache.commons.collections4.[IterableUtils](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html)

Answers true if the provided iterable is empty.

[isEmpty(Iterator<?>)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#isEmpty-java.util.Iterator-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Checks if the given iterator is empty.

[isEmpty()](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#isEmpty--) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)   [isEmpty()](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#isEmpty--) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Checks whether the map is currently empty.

[isEmpty()](http://docs.google.com/org/apache/commons/collections4/map/AbstractMapDecorator.html#isEmpty--) - Method in class org.apache.commons.collections4.map.[AbstractMapDecorator](http://docs.google.com/org/apache/commons/collections4/map/AbstractMapDecorator.html)   [isEmpty()](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html#isEmpty--) - Method in class org.apache.commons.collections4.map.[AbstractReferenceMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html)

Checks whether the map is currently empty.

[isEmpty()](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html#isEmpty--) - Method in class org.apache.commons.collections4.map.[CompositeMap](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html)

Returns true if this map contains no key-value mappings.

[isEmpty()](http://docs.google.com/org/apache/commons/collections4/map/Flat3Map.html#isEmpty--) - Method in class org.apache.commons.collections4.map.[Flat3Map](http://docs.google.com/org/apache/commons/collections4/map/Flat3Map.html)

Checks whether the map is currently empty.

[isEmpty()](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.html#isEmpty--) - Method in class org.apache.commons.collections4.map.[PassiveExpiringMap](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.html)

All expired entries are removed from the map prior to determining if it is empty.

[isEmpty()](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html#isEmpty--) - Method in class org.apache.commons.collections4.map.[SingletonMap](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html)

Checks whether the map is currently empty, which it never is.

[isEmpty()](http://docs.google.com/org/apache/commons/collections4/map/StaticBucketMap.html#isEmpty--) - Method in class org.apache.commons.collections4.map.[StaticBucketMap](http://docs.google.com/org/apache/commons/collections4/map/StaticBucketMap.html)

Checks if the size is currently zero.

[isEmpty(Map<?, ?>)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#isEmpty-java.util.Map-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Null-safe check if the specified map is empty.

[isEmpty()](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html#isEmpty--) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html)   [isEmpty()](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html#isEmpty--) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMapDecorator](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html)   [isEmpty(MultiValuedMap<?, ?>)](http://docs.google.com/org/apache/commons/collections4/MultiMapUtils.html#isEmpty-org.apache.commons.collections4.MultiValuedMap-) - Static method in class org.apache.commons.collections4.[MultiMapUtils](http://docs.google.com/org/apache/commons/collections4/MultiMapUtils.html)

Null-safe check if the specified MultiValuedMap is empty.

[isEmpty()](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.html#isEmpty--) - Method in class org.apache.commons.collections4.multiset.[AbstractMapMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.html)

Returns true if the underlying map is empty.

[isEmpty()](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html#isEmpty--) - Method in interface org.apache.commons.collections4.[MultiValuedMap](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html)

Returns true if this map contains no key-value mappings.

[isEmpty()](http://docs.google.com/org/apache/commons/collections4/queue/CircularFifoQueue.html#isEmpty--) - Method in class org.apache.commons.collections4.queue.[CircularFifoQueue](http://docs.google.com/org/apache/commons/collections4/queue/CircularFifoQueue.html)

Returns true if this queue is empty; false otherwise.

[isEmpty()](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html#isEmpty--) - Method in class org.apache.commons.collections4.set.[CompositeSet](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html)

Checks whether this composite set is empty.

[isEmpty()](http://docs.google.com/org/apache/commons/collections4/set/MapBackedSet.html#isEmpty--) - Method in class org.apache.commons.collections4.set.[MapBackedSet](http://docs.google.com/org/apache/commons/collections4/set/MapBackedSet.html)   [isEmpty()](http://docs.google.com/org/apache/commons/collections4/splitmap/AbstractIterableGetMapDecorator.html#isEmpty--) - Method in class org.apache.commons.collections4.splitmap.[AbstractIterableGetMapDecorator](http://docs.google.com/org/apache/commons/collections4/splitmap/AbstractIterableGetMapDecorator.html)   [isEmpty()](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html#isEmpty--) - Method in class org.apache.commons.collections4.trie.[UnmodifiableTrie](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html)   [isEqualCollection(Collection<?>, Collection<?>)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#isEqualCollection-java.util.Collection-java.util.Collection-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Returns true iff the given [Collection](https://docs.oracle.com/javase/7/docs/api/java/util/Collection.html?is-external=true)s contain exactly the same elements with exactly the same cardinalities.

[isEqualCollection(Collection<? extends E>, Collection<? extends E>, Equator<? super E>)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#isEqualCollection-java.util.Collection-java.util.Collection-org.apache.commons.collections4.Equator-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Returns true iff the given [Collection](https://docs.oracle.com/javase/7/docs/api/java/util/Collection.html?is-external=true)s contain exactly the same elements with exactly the same cardinalities.

[isEqualKey(Object, Object)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#isEqualKey-java.lang.Object-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Compares two keys, in internal converted form, to see if they are equal.

[isEqualKey(Object, Object)](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html#isEqualKey-java.lang.Object-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[AbstractReferenceMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html)

Compares two keys, in internal converted form, to see if they are equal.

[isEqualKey(AbstractHashedMap.HashEntry<MultiKey<? extends K>, V>, Object, Object)](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html#isEqualKey-org.apache.commons.collections4.map.AbstractHashedMap.HashEntry-java.lang.Object-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[MultiKeyMap](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html)

Is the key equal to the combined key.

[isEqualKey(AbstractHashedMap.HashEntry<MultiKey<? extends K>, V>, Object, Object, Object)](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html#isEqualKey-org.apache.commons.collections4.map.AbstractHashedMap.HashEntry-java.lang.Object-java.lang.Object-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[MultiKeyMap](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html)

Is the key equal to the combined key.

[isEqualKey(AbstractHashedMap.HashEntry<MultiKey<? extends K>, V>, Object, Object, Object, Object)](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html#isEqualKey-org.apache.commons.collections4.map.AbstractHashedMap.HashEntry-java.lang.Object-java.lang.Object-java.lang.Object-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[MultiKeyMap](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html)

Is the key equal to the combined key.

[isEqualKey(AbstractHashedMap.HashEntry<MultiKey<? extends K>, V>, Object, Object, Object, Object, Object)](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html#isEqualKey-org.apache.commons.collections4.map.AbstractHashedMap.HashEntry-java.lang.Object-java.lang.Object-java.lang.Object-java.lang.Object-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[MultiKeyMap](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html)

Is the key equal to the combined key.

[isEqualKey(Object, Object)](http://docs.google.com/org/apache/commons/collections4/map/ReferenceIdentityMap.html#isEqualKey-java.lang.Object-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[ReferenceIdentityMap](http://docs.google.com/org/apache/commons/collections4/map/ReferenceIdentityMap.html)

Compares two keys for equals.

[isEqualKey(Object)](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html#isEqualKey-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[SingletonMap](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html)

Compares the specified key to the stored key.

[isEqualList(Collection<?>, Collection<?>)](http://docs.google.com/org/apache/commons/collections4/ListUtils.html#isEqualList-java.util.Collection-java.util.Collection-) - Static method in class org.apache.commons.collections4.[ListUtils](http://docs.google.com/org/apache/commons/collections4/ListUtils.html)

Tests two lists for value-equality as per the equality contract in [List.equals(java.lang.Object)](https://docs.oracle.com/javase/7/docs/api/java/util/List.html?is-external=true#equals-java.lang.Object-).

[isEqualSet(Collection<?>, Collection<?>)](http://docs.google.com/org/apache/commons/collections4/SetUtils.html#isEqualSet-java.util.Collection-java.util.Collection-) - Static method in class org.apache.commons.collections4.[SetUtils](http://docs.google.com/org/apache/commons/collections4/SetUtils.html)

Tests two sets for equality as per the equals() contract in [Set.equals(java.lang.Object)](https://docs.oracle.com/javase/7/docs/api/java/util/Set.html?is-external=true#equals-java.lang.Object-).

[isEqualValue(Object, Object)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#isEqualValue-java.lang.Object-java.lang.Object-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)

Compares two values for equals.

[isEqualValue(Object, Object)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#isEqualValue-java.lang.Object-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Compares two values, in external form, to see if they are equal.

[isEqualValue(Object, Object)](http://docs.google.com/org/apache/commons/collections4/map/ReferenceIdentityMap.html#isEqualValue-java.lang.Object-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[ReferenceIdentityMap](http://docs.google.com/org/apache/commons/collections4/map/ReferenceIdentityMap.html)

Compares two values for equals.

[isEqualValue(Object)](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html#isEqualValue-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[SingletonMap](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html)

Compares the specified value to the stored value.

[isFull()](http://docs.google.com/org/apache/commons/collections4/BoundedCollection.html#isFull--) - Method in interface org.apache.commons.collections4.[BoundedCollection](http://docs.google.com/org/apache/commons/collections4/BoundedCollection.html)

Returns true if this collection is full and no new elements can be added.

[isFull()](http://docs.google.com/org/apache/commons/collections4/BoundedMap.html#isFull--) - Method in interface org.apache.commons.collections4.[BoundedMap](http://docs.google.com/org/apache/commons/collections4/BoundedMap.html)

Returns true if this map is full and no new elements can be added.

[isFull()](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableBoundedCollection.html#isFull--) - Method in class org.apache.commons.collections4.collection.[UnmodifiableBoundedCollection](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableBoundedCollection.html)   [isFull(Collection<? extends Object>)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#isFull-java.util.Collection-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Returns true if no more elements can be added to the Collection.

[isFull()](http://docs.google.com/org/apache/commons/collections4/list/FixedSizeList.html#isFull--) - Method in class org.apache.commons.collections4.list.[FixedSizeList](http://docs.google.com/org/apache/commons/collections4/list/FixedSizeList.html)   [isFull()](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeMap.html#isFull--) - Method in class org.apache.commons.collections4.map.[FixedSizeMap](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeMap.html)   [isFull()](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeSortedMap.html#isFull--) - Method in class org.apache.commons.collections4.map.[FixedSizeSortedMap](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeSortedMap.html)   [isFull()](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html#isFull--) - Method in class org.apache.commons.collections4.map.[LRUMap](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html)

Returns true if this map is full and no new mappings can be added.

[isFull()](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html#isFull--) - Method in class org.apache.commons.collections4.map.[SingletonMap](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html)

Is the map currently full, always true.

[isFull()](http://docs.google.com/org/apache/commons/collections4/queue/CircularFifoQueue.html#isFull--) - Method in class org.apache.commons.collections4.queue.[CircularFifoQueue](http://docs.google.com/org/apache/commons/collections4/queue/CircularFifoQueue.html)

Returns true if this collection is full and no new elements can be added.

[isKeyType(AbstractReferenceMap.ReferenceStrength)](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html#isKeyType-org.apache.commons.collections4.map.AbstractReferenceMap.ReferenceStrength-) - Method in class org.apache.commons.collections4.map.[AbstractReferenceMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html)

Provided protected read-only access to the key type.

[isLocked()](http://docs.google.com/org/apache/commons/collections4/comparators/ComparatorChain.html#isLocked--) - Method in class org.apache.commons.collections4.comparators.[ComparatorChain](http://docs.google.com/org/apache/commons/collections4/comparators/ComparatorChain.html)

Determine if modifications can still be made to the ComparatorChain.

[isLocked()](http://docs.google.com/org/apache/commons/collections4/comparators/FixedOrderComparator.html#isLocked--) - Method in class org.apache.commons.collections4.comparators.[FixedOrderComparator](http://docs.google.com/org/apache/commons/collections4/comparators/FixedOrderComparator.html)

Returns true if modifications cannot be made to the FixedOrderComparator.

[isLocked()](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorChain.html#isLocked--) - Method in class org.apache.commons.collections4.iterators.[IteratorChain](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorChain.html)

Determine if modifications can still be made to the IteratorChain.

[isNotEmpty(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#isNotEmpty-java.util.Collection-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Null-safe check if the specified collection is not empty.

[isNotEmpty(Map<?, ?>)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#isNotEmpty-java.util.Map-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Null-safe check if the specified map is not empty.

[isPrefix(String, int, int, String)](http://docs.google.com/org/apache/commons/collections4/trie/analyzer/StringKeyAnalyzer.html#isPrefix-java.lang.String-int-int-java.lang.String-) - Method in class org.apache.commons.collections4.trie.analyzer.[StringKeyAnalyzer](http://docs.google.com/org/apache/commons/collections4/trie/analyzer/StringKeyAnalyzer.html)   [isPrefix(K, int, int, K)](http://docs.google.com/org/apache/commons/collections4/trie/KeyAnalyzer.html#isPrefix-K-int-int-K-) - Method in class org.apache.commons.collections4.trie.[KeyAnalyzer](http://docs.google.com/org/apache/commons/collections4/trie/KeyAnalyzer.html)

Determines whether or not the given prefix (from offset to length) is a prefix of the given key.

[isProperSubCollection(Collection<?>, Collection<?>)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#isProperSubCollection-java.util.Collection-java.util.Collection-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Returns true iff *a* is a *proper* sub-collection of *b*, that is, iff the cardinality of *e* in *a* is less than or equal to the cardinality of *e* in *b*, for each element *e* in *a*, and there is at least one element *f* such that the cardinality of *f* in *b* is strictly greater than the cardinality of *f* in *a*.

[isScanUntilRemovable()](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html#isScanUntilRemovable--) - Method in class org.apache.commons.collections4.map.[LRUMap](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html)

Whether this LRUMap will scan until a removable entry is found when the map is full.

[isSetValueChecking()](http://docs.google.com/org/apache/commons/collections4/map/PredicatedMap.html#isSetValueChecking--) - Method in class org.apache.commons.collections4.map.[PredicatedMap](http://docs.google.com/org/apache/commons/collections4/map/PredicatedMap.html)

Override to only return true when there is a value transformer.

[isSetValueChecking()](http://docs.google.com/org/apache/commons/collections4/map/TransformedMap.html#isSetValueChecking--) - Method in class org.apache.commons.collections4.map.[TransformedMap](http://docs.google.com/org/apache/commons/collections4/map/TransformedMap.html)

Override to only return true when there is a value transformer.

[isSubCollection(Collection<?>, Collection<?>)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#isSubCollection-java.util.Collection-java.util.Collection-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Returns true iff *a* is a sub-collection of *b*, that is, iff the cardinality of *e* in *a* is less than or equal to the cardinality of *e* in *b*, for each element *e* in *a*.

[isValueType(AbstractReferenceMap.ReferenceStrength)](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html#isValueType-org.apache.commons.collections4.map.AbstractReferenceMap.ReferenceStrength-) - Method in class org.apache.commons.collections4.map.[AbstractReferenceMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html)

Provided protected read-only access to the value type.

[IterableGet](http://docs.google.com/org/apache/commons/collections4/IterableGet.html)<[K](http://docs.google.com/org/apache/commons/collections4/IterableGet.html),[V](http://docs.google.com/org/apache/commons/collections4/IterableGet.html)> - Interface in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

The "read" subset of the [Map](https://docs.oracle.com/javase/7/docs/api/java/util/Map.html?is-external=true) interface.

[IterableMap](http://docs.google.com/org/apache/commons/collections4/IterableMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/IterableMap.html),[V](http://docs.google.com/org/apache/commons/collections4/IterableMap.html)> - Interface in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

Defines a map that can be iterated directly without needing to create an entry set.

[iterableMap(Map<K, V>)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#iterableMap-java.util.Map-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Get the specified [Map](https://docs.oracle.com/javase/7/docs/api/java/util/Map.html?is-external=true) as an [IterableMap](http://docs.google.com/org/apache/commons/collections4/IterableMap.html).

[IterableSortedMap](http://docs.google.com/org/apache/commons/collections4/IterableSortedMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/IterableSortedMap.html),[V](http://docs.google.com/org/apache/commons/collections4/IterableSortedMap.html)> - Interface in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

[SortedMap](https://docs.oracle.com/javase/7/docs/api/java/util/SortedMap.html?is-external=true) + [OrderedMap](http://docs.google.com/org/apache/commons/collections4/OrderedMap.html).

[iterableSortedMap(SortedMap<K, V>)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#iterableSortedMap-java.util.SortedMap-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Get the specified [SortedMap](https://docs.oracle.com/javase/7/docs/api/java/util/SortedMap.html?is-external=true) as an [IterableSortedMap](http://docs.google.com/org/apache/commons/collections4/IterableSortedMap.html).

[IterableUtils](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html) - Class in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

Provides utility methods and decorators for [Iterable](https://docs.oracle.com/javase/7/docs/api/java/lang/Iterable.html?is-external=true) instances.

[IterableUtils()](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#IterableUtils--) - Constructor for class org.apache.commons.collections4.[IterableUtils](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html)   [iterator()](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html#iterator--) - Method in class org.apache.commons.collections4.bag.[AbstractMapBag](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html)

Gets an iterator over the bag elements.

[iterator()](http://docs.google.com/org/apache/commons/collections4/Bag.html#iterator--) - Method in interface org.apache.commons.collections4.[Bag](http://docs.google.com/org/apache/commons/collections4/Bag.html)

Returns an [Iterator](https://docs.oracle.com/javase/7/docs/api/java/util/Iterator.html?is-external=true) over the entire set of members, including copies due to cardinality.

[iterator()](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableBag.html#iterator--) - Method in class org.apache.commons.collections4.bag.[UnmodifiableBag](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableBag.html)   [iterator()](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableSortedBag.html#iterator--) - Method in class org.apache.commons.collections4.bag.[UnmodifiableSortedBag](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableSortedBag.html)   [iterator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.BidiMapIterator.html#iterator) - Variable in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.BidiMapIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.BidiMapIterator.html)

The iterator being wrapped

[iterator()](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.EntrySet.html#iterator--) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.EntrySet](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.EntrySet.html)   [iterator()](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.KeySet.html#iterator--) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.KeySet](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.KeySet.html)   [iterator()](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.Values.html#iterator--) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.Values](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.Values.html)   [iterator()](http://docs.google.com/org/apache/commons/collections4/collection/AbstractCollectionDecorator.html#iterator--) - Method in class org.apache.commons.collections4.collection.[AbstractCollectionDecorator](http://docs.google.com/org/apache/commons/collections4/collection/AbstractCollectionDecorator.html)   [iterator()](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html#iterator--) - Method in class org.apache.commons.collections4.collection.[CompositeCollection](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html)

Gets an iterator over all the collections in this composite.

[iterator()](http://docs.google.com/org/apache/commons/collections4/collection/SynchronizedCollection.html#iterator--) - Method in class org.apache.commons.collections4.collection.[SynchronizedCollection](http://docs.google.com/org/apache/commons/collections4/collection/SynchronizedCollection.html)

Iterators must be manually synchronized.

[iterator()](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableBoundedCollection.html#iterator--) - Method in class org.apache.commons.collections4.collection.[UnmodifiableBoundedCollection](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableBoundedCollection.html)   [iterator()](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableCollection.html#iterator--) - Method in class org.apache.commons.collections4.collection.[UnmodifiableCollection](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableCollection.html)   [iterator()](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html#iterator--) - Method in class org.apache.commons.collections4.[FluentIterable](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html) [iterator()](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorIterable.html#iterator--) - Method in class org.apache.commons.collections4.iterators.[IteratorIterable](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorIterable.html)

Gets the iterator wrapped by this iterable.

[iterator()](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#iterator--) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)   [iterator()](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedSubList.html#iterator--) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList.LinkedSubList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedSubList.html)   [iterator()](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.html#iterator--) - Method in class org.apache.commons.collections4.list.[CursorableLinkedList](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.html)

Returns an iterator that does **not** support concurrent modification.

[iterator()](http://docs.google.com/org/apache/commons/collections4/list/FixedSizeList.html#iterator--) - Method in class org.apache.commons.collections4.list.[FixedSizeList](http://docs.google.com/org/apache/commons/collections4/list/FixedSizeList.html)   [iterator()](http://docs.google.com/org/apache/commons/collections4/list/SetUniqueList.html#iterator--) - Method in class org.apache.commons.collections4.list.[SetUniqueList](http://docs.google.com/org/apache/commons/collections4/list/SetUniqueList.html)   [iterator()](http://docs.google.com/org/apache/commons/collections4/list/TreeList.html#iterator--) - Method in class org.apache.commons.collections4.list.[TreeList](http://docs.google.com/org/apache/commons/collections4/list/TreeList.html)

Gets an iterator over the list.

[iterator()](http://docs.google.com/org/apache/commons/collections4/list/UnmodifiableList.html#iterator--) - Method in class org.apache.commons.collections4.list.[UnmodifiableList](http://docs.google.com/org/apache/commons/collections4/list/UnmodifiableList.html)   [iterator()](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.EntrySet.html#iterator--) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap.EntrySet](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.EntrySet.html)   [iterator()](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySet.html#iterator--) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap.KeySet](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySet.html)   [iterator()](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.Values.html#iterator--) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap.Values](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.Values.html)   [iterator(Object)](http://docs.google.com/org/apache/commons/collections4/map/MultiValueMap.html#iterator-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[MultiValueMap](http://docs.google.com/org/apache/commons/collections4/map/MultiValueMap.html)

Deprecated.

Gets an iterator for the collection mapped to the specified key.

[iterator()](http://docs.google.com/org/apache/commons/collections4/map/MultiValueMap.html#iterator--) - Method in class org.apache.commons.collections4.map.[MultiValueMap](http://docs.google.com/org/apache/commons/collections4/map/MultiValueMap.html)

Deprecated.

Gets an iterator for all mappings stored in this [MultiValueMap](http://docs.google.com/org/apache/commons/collections4/map/MultiValueMap.html).

[iterator()](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableEntrySet.html#iterator--) - Method in class org.apache.commons.collections4.map.[UnmodifiableEntrySet](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableEntrySet.html)   [iterator()](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.html#iterator--) - Method in class org.apache.commons.collections4.multiset.[AbstractMapMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.html)

Gets an iterator over the multiset elements.

[iterator()](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.EntrySet.html#iterator--) - Method in class org.apache.commons.collections4.multiset.[AbstractMultiSet.EntrySet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.EntrySet.html)   [iterator()](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html#iterator--) - Method in class org.apache.commons.collections4.multiset.[AbstractMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html)

Gets an iterator over the multiset elements.

[iterator()](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.UniqueSet.html#iterator--) - Method in class org.apache.commons.collections4.multiset.[AbstractMultiSet.UniqueSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.UniqueSet.html)   [iterator()](http://docs.google.com/org/apache/commons/collections4/MultiSet.html#iterator--) - Method in interface org.apache.commons.collections4.[MultiSet](http://docs.google.com/org/apache/commons/collections4/MultiSet.html)

Returns an [Iterator](https://docs.oracle.com/javase/7/docs/api/java/util/Iterator.html?is-external=true) over the entire set of members, including copies due to cardinality.

[iterator()](http://docs.google.com/org/apache/commons/collections4/multiset/UnmodifiableMultiSet.html#iterator--) - Method in class org.apache.commons.collections4.multiset.[UnmodifiableMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/UnmodifiableMultiSet.html)   [iterator()](http://docs.google.com/org/apache/commons/collections4/queue/CircularFifoQueue.html#iterator--) - Method in class org.apache.commons.collections4.queue.[CircularFifoQueue](http://docs.google.com/org/apache/commons/collections4/queue/CircularFifoQueue.html)

Returns an iterator over this queue's elements.

[iterator()](http://docs.google.com/org/apache/commons/collections4/queue/UnmodifiableQueue.html#iterator--) - Method in class org.apache.commons.collections4.queue.[UnmodifiableQueue](http://docs.google.com/org/apache/commons/collections4/queue/UnmodifiableQueue.html)   [iterator()](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html#iterator--) - Method in class org.apache.commons.collections4.set.[CompositeSet](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html)

Gets an iterator over all the sets in this composite.

[iterator()](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html#iterator--) - Method in class org.apache.commons.collections4.set.[ListOrderedSet](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html)   [iterator()](http://docs.google.com/org/apache/commons/collections4/set/MapBackedSet.html#iterator--) - Method in class org.apache.commons.collections4.set.[MapBackedSet](http://docs.google.com/org/apache/commons/collections4/set/MapBackedSet.html)   [iterator()](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableNavigableSet.html#iterator--) - Method in class org.apache.commons.collections4.set.[UnmodifiableNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableNavigableSet.html)   [iterator()](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableSet.html#iterator--) - Method in class org.apache.commons.collections4.set.[UnmodifiableSet](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableSet.html)   [iterator()](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableSortedSet.html#iterator--) - Method in class org.apache.commons.collections4.set.[UnmodifiableSortedSet](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableSortedSet.html)   [iterator()](http://docs.google.com/org/apache/commons/collections4/SetUtils.SetView.html#iterator--) - Method in class org.apache.commons.collections4.[SetUtils.SetView](http://docs.google.com/org/apache/commons/collections4/SetUtils.SetView.html)   [IteratorChain](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorChain.html)<[E](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorChain.html)> - Class in [org.apache.commons.collections4.iterators](http://docs.google.com/org/apache/commons/collections4/iterators/package-summary.html)

An IteratorChain is an Iterator that wraps a number of Iterators.

[IteratorChain()](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorChain.html#IteratorChain--) - Constructor for class org.apache.commons.collections4.iterators.[IteratorChain](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorChain.html)

Construct an IteratorChain with no Iterators.

[IteratorChain(Iterator<? extends E>)](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorChain.html#IteratorChain-java.util.Iterator-) - Constructor for class org.apache.commons.collections4.iterators.[IteratorChain](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorChain.html)

Construct an IteratorChain with a single Iterator.

[IteratorChain(Iterator<? extends E>, Iterator<? extends E>)](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorChain.html#IteratorChain-java.util.Iterator-java.util.Iterator-) - Constructor for class org.apache.commons.collections4.iterators.[IteratorChain](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorChain.html)

Constructs a new IteratorChain over the two given iterators.

[IteratorChain(Iterator<? extends E>...)](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorChain.html#IteratorChain-java.util.Iterator...-) - Constructor for class org.apache.commons.collections4.iterators.[IteratorChain](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorChain.html)

Constructs a new IteratorChain over the array of iterators.

[IteratorChain(Collection<Iterator<? extends E>>)](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorChain.html#IteratorChain-java.util.Collection-) - Constructor for class org.apache.commons.collections4.iterators.[IteratorChain](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorChain.html)

Constructs a new IteratorChain over the collection of iterators.

[IteratorEnumeration](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorEnumeration.html)<[E](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorEnumeration.html)> - Class in [org.apache.commons.collections4.iterators](http://docs.google.com/org/apache/commons/collections4/iterators/package-summary.html)

Adapter to make an [Iterator](https://docs.oracle.com/javase/7/docs/api/java/util/Iterator.html?is-external=true) instance appear to be an [Enumeration](https://docs.oracle.com/javase/7/docs/api/java/util/Enumeration.html?is-external=true) instance.

[IteratorEnumeration()](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorEnumeration.html#IteratorEnumeration--) - Constructor for class org.apache.commons.collections4.iterators.[IteratorEnumeration](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorEnumeration.html)

Constructs a new IteratorEnumeration that will not function until [setIterator](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorEnumeration.html#setIterator-java.util.Iterator-) is invoked.

[IteratorEnumeration(Iterator<? extends E>)](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorEnumeration.html#IteratorEnumeration-java.util.Iterator-) - Constructor for class org.apache.commons.collections4.iterators.[IteratorEnumeration](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorEnumeration.html)

Constructs a new IteratorEnumeration that will use the given iterator.

[IteratorIterable](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorIterable.html)<[E](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorIterable.html)> - Class in [org.apache.commons.collections4.iterators](http://docs.google.com/org/apache/commons/collections4/iterators/package-summary.html)

Adapter to make an [Iterator](https://docs.oracle.com/javase/7/docs/api/java/util/Iterator.html?is-external=true) instance appear to be an [Iterable](https://docs.oracle.com/javase/7/docs/api/java/lang/Iterable.html?is-external=true) instance.

[IteratorIterable(Iterator<? extends E>)](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorIterable.html#IteratorIterable-java.util.Iterator-) - Constructor for class org.apache.commons.collections4.iterators.[IteratorIterable](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorIterable.html)

Constructs a new IteratorIterable that will use the given iterator.

[IteratorIterable(Iterator<? extends E>, boolean)](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorIterable.html#IteratorIterable-java.util.Iterator-boolean-) - Constructor for class org.apache.commons.collections4.iterators.[IteratorIterable](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorIterable.html)

Constructs a new IteratorIterable that will use the given iterator.

[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html) - Class in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

Provides static utility methods and decorators for [Iterator](https://docs.oracle.com/javase/7/docs/api/java/util/Iterator.html?is-external=true) instances.

## K

[KeepCommand](http://docs.google.com/org/apache/commons/collections4/sequence/KeepCommand.html)<[T](http://docs.google.com/org/apache/commons/collections4/sequence/KeepCommand.html)> - Class in [org.apache.commons.collections4.sequence](http://docs.google.com/org/apache/commons/collections4/sequence/package-summary.html)

Command representing the keeping of one object present in both sequences.

[KeepCommand(T)](http://docs.google.com/org/apache/commons/collections4/sequence/KeepCommand.html#KeepCommand-T-) - Constructor for class org.apache.commons.collections4.sequence.[KeepCommand](http://docs.google.com/org/apache/commons/collections4/sequence/KeepCommand.html)

Simple constructor.

[key](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html#key) - Variable in class org.apache.commons.collections4.map.[AbstractHashedMap.HashEntry](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html)

The key

[KeyAnalyzer](http://docs.google.com/org/apache/commons/collections4/trie/KeyAnalyzer.html)<[K](http://docs.google.com/org/apache/commons/collections4/trie/KeyAnalyzer.html)> - Class in [org.apache.commons.collections4.trie](http://docs.google.com/org/apache/commons/collections4/trie/package-summary.html)

Defines the interface to analyze [Trie](http://docs.google.com/org/apache/commons/collections4/Trie.html) keys on a bit level.

[KeyAnalyzer()](http://docs.google.com/org/apache/commons/collections4/trie/KeyAnalyzer.html#KeyAnalyzer--) - Constructor for class org.apache.commons.collections4.trie.[KeyAnalyzer](http://docs.google.com/org/apache/commons/collections4/trie/KeyAnalyzer.html)   [keyList()](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html#keyList--) - Method in class org.apache.commons.collections4.map.[ListOrderedMap](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html)

Gets a view over the keys in the map as a List.

[keyPredicate](http://docs.google.com/org/apache/commons/collections4/map/PredicatedMap.html#keyPredicate) - Variable in class org.apache.commons.collections4.map.[PredicatedMap](http://docs.google.com/org/apache/commons/collections4/map/PredicatedMap.html)

The key predicate to use

[keys()](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html#keys--) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html)

Returns a [MultiSet](http://docs.google.com/org/apache/commons/collections4/MultiSet.html) view of the key mapping contained in this map.

[keys()](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html#keys--) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMapDecorator](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html)   [keys()](http://docs.google.com/org/apache/commons/collections4/multimap/UnmodifiableMultiValuedMap.html#keys--) - Method in class org.apache.commons.collections4.multimap.[UnmodifiableMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/UnmodifiableMultiValuedMap.html)   [keys()](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html#keys--) - Method in interface org.apache.commons.collections4.[MultiValuedMap](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html)

Returns a [MultiSet](http://docs.google.com/org/apache/commons/collections4/MultiSet.html) view of the keys contained in this multi-valued map.

[keys()](http://docs.google.com/org/apache/commons/collections4/properties/SortedProperties.html#keys--) - Method in class org.apache.commons.collections4.properties.[SortedProperties](http://docs.google.com/org/apache/commons/collections4/properties/SortedProperties.html)   [keySet()](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html#keySet--) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html)

Gets a keySet view of the map.

[KeySet(AbstractDualBidiMap<K, ?>)](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.KeySet.html#KeySet-org.apache.commons.collections4.bidimap.AbstractDualBidiMap-) - Constructor for class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.KeySet](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.KeySet.html)

Constructs a new view of the BidiMap.

[keySet()](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html#keySet--) - Method in class org.apache.commons.collections4.bidimap.[TreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html)

Returns a set view of the keys contained in this map in key order.

[keySet()](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableBidiMap.html#keySet--) - Method in class org.apache.commons.collections4.bidimap.[UnmodifiableBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableBidiMap.html)   [keySet()](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableOrderedBidiMap.html#keySet--) - Method in class org.apache.commons.collections4.bidimap.[UnmodifiableOrderedBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableOrderedBidiMap.html)   [keySet()](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableSortedBidiMap.html#keySet--) - Method in class org.apache.commons.collections4.bidimap.[UnmodifiableSortedBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableSortedBidiMap.html)   [keySet()](http://docs.google.com/org/apache/commons/collections4/Get.html#keySet--) - Method in interface org.apache.commons.collections4.[Get](http://docs.google.com/org/apache/commons/collections4/Get.html)   [keySet()](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#keySet--) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Gets the keySet view of the map.

[KeySet(AbstractHashedMap<K, ?>)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySet.html#KeySet-org.apache.commons.collections4.map.AbstractHashedMap-) - Constructor for class org.apache.commons.collections4.map.[AbstractHashedMap.KeySet](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySet.html)   [keySet()](http://docs.google.com/org/apache/commons/collections4/map/AbstractMapDecorator.html#keySet--) - Method in class org.apache.commons.collections4.map.[AbstractMapDecorator](http://docs.google.com/org/apache/commons/collections4/map/AbstractMapDecorator.html)   [keySet()](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html#keySet--) - Method in class org.apache.commons.collections4.map.[AbstractReferenceMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html)

Returns a set view of this map's keys.

[keySet()](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html#keySet--) - Method in class org.apache.commons.collections4.map.[CompositeMap](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html)

Returns a set view of the keys contained in this map.

[keySet()](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeMap.html#keySet--) - Method in class org.apache.commons.collections4.map.[FixedSizeMap](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeMap.html)   [keySet()](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeSortedMap.html#keySet--) - Method in class org.apache.commons.collections4.map.[FixedSizeSortedMap](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeSortedMap.html)   [keySet()](http://docs.google.com/org/apache/commons/collections4/map/Flat3Map.html#keySet--) - Method in class org.apache.commons.collections4.map.[Flat3Map](http://docs.google.com/org/apache/commons/collections4/map/Flat3Map.html)

Gets the keySet view of the map.

[keySet()](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html#keySet--) - Method in class org.apache.commons.collections4.map.[ListOrderedMap](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html)

Gets a view over the keys in the map.

[keySet()](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.html#keySet--) - Method in class org.apache.commons.collections4.map.[PassiveExpiringMap](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.html)

All expired entries are removed from the map prior to returning the key set.

[keySet()](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html#keySet--) - Method in class org.apache.commons.collections4.map.[SingletonMap](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html)

Gets the unmodifiable keySet view of the map.

[keySet()](http://docs.google.com/org/apache/commons/collections4/map/StaticBucketMap.html#keySet--) - Method in class org.apache.commons.collections4.map.[StaticBucketMap](http://docs.google.com/org/apache/commons/collections4/map/StaticBucketMap.html)

Gets the key set.

[keySet()](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableMap.html#keySet--) - Method in class org.apache.commons.collections4.map.[UnmodifiableMap](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableMap.html)   [keySet()](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableOrderedMap.html#keySet--) - Method in class org.apache.commons.collections4.map.[UnmodifiableOrderedMap](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableOrderedMap.html)   [keySet()](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableSortedMap.html#keySet--) - Method in class org.apache.commons.collections4.map.[UnmodifiableSortedMap](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableSortedMap.html)   [keySet()](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html#keySet--) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html)   [keySet()](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html#keySet--) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMapDecorator](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html)   [keySet()](http://docs.google.com/org/apache/commons/collections4/multimap/UnmodifiableMultiValuedMap.html#keySet--) - Method in class org.apache.commons.collections4.multimap.[UnmodifiableMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/UnmodifiableMultiValuedMap.html)   [keySet()](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html#keySet--) - Method in interface org.apache.commons.collections4.[MultiValuedMap](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html)

Returns a [Set](https://docs.oracle.com/javase/7/docs/api/java/util/Set.html?is-external=true) view of the keys contained in this multi-valued map.

[keySet()](http://docs.google.com/org/apache/commons/collections4/splitmap/AbstractIterableGetMapDecorator.html#keySet--) - Method in class org.apache.commons.collections4.splitmap.[AbstractIterableGetMapDecorator](http://docs.google.com/org/apache/commons/collections4/splitmap/AbstractIterableGetMapDecorator.html)   [keySet()](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html#keySet--) - Method in class org.apache.commons.collections4.trie.[UnmodifiableTrie](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html)   [KeySetIterator(Iterator<K>, AbstractDualBidiMap<K, ?>)](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.KeySetIterator.html#KeySetIterator-java.util.Iterator-org.apache.commons.collections4.bidimap.AbstractDualBidiMap-) - Constructor for class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.KeySetIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.KeySetIterator.html)

Constructor.

[KeySetIterator(AbstractHashedMap<K, ?>)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySetIterator.html#KeySetIterator-org.apache.commons.collections4.map.AbstractHashedMap-) - Constructor for class org.apache.commons.collections4.map.[AbstractHashedMap.KeySetIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySetIterator.html)   [KeySetIterator(AbstractLinkedMap<K, ?>)](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.KeySetIterator.html#KeySetIterator-org.apache.commons.collections4.map.AbstractLinkedMap-) - Constructor for class org.apache.commons.collections4.map.[AbstractLinkedMap.KeySetIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.KeySetIterator.html)   [keyTransformer](http://docs.google.com/org/apache/commons/collections4/map/TransformedMap.html#keyTransformer) - Variable in class org.apache.commons.collections4.map.[TransformedMap](http://docs.google.com/org/apache/commons/collections4/map/TransformedMap.html)

The transformer to use for the key

[KeyValue](http://docs.google.com/org/apache/commons/collections4/KeyValue.html)<[K](http://docs.google.com/org/apache/commons/collections4/KeyValue.html),[V](http://docs.google.com/org/apache/commons/collections4/KeyValue.html)> - Interface in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

Defines a simple key value pair.

## L

[last()](http://docs.google.com/org/apache/commons/collections4/bag/AbstractSortedBagDecorator.html#last--) - Method in class org.apache.commons.collections4.bag.[AbstractSortedBagDecorator](http://docs.google.com/org/apache/commons/collections4/bag/AbstractSortedBagDecorator.html)   [last()](http://docs.google.com/org/apache/commons/collections4/bag/PredicatedSortedBag.html#last--) - Method in class org.apache.commons.collections4.bag.[PredicatedSortedBag](http://docs.google.com/org/apache/commons/collections4/bag/PredicatedSortedBag.html)   [last()](http://docs.google.com/org/apache/commons/collections4/bag/SynchronizedSortedBag.html#last--) - Method in class org.apache.commons.collections4.bag.[SynchronizedSortedBag](http://docs.google.com/org/apache/commons/collections4/bag/SynchronizedSortedBag.html)   [last()](http://docs.google.com/org/apache/commons/collections4/bag/TransformedSortedBag.html#last--) - Method in class org.apache.commons.collections4.bag.[TransformedSortedBag](http://docs.google.com/org/apache/commons/collections4/bag/TransformedSortedBag.html)   [last()](http://docs.google.com/org/apache/commons/collections4/bag/TreeBag.html#last--) - Method in class org.apache.commons.collections4.bag.[TreeBag](http://docs.google.com/org/apache/commons/collections4/bag/TreeBag.html)   [last](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.BidiMapIterator.html#last) - Variable in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.BidiMapIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.BidiMapIterator.html)

The last returned entry

[last](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.EntrySetIterator.html#last) - Variable in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.EntrySetIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.EntrySetIterator.html)

The last returned entry

[last](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkIterator.html#last) - Variable in class org.apache.commons.collections4.map.[AbstractLinkedMap.LinkIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkIterator.html)

The current (last returned) entry

[last](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.EntrySetIterator.html#last) - Variable in class org.apache.commons.collections4.multiset.[AbstractMapMultiSet.EntrySetIterator](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.EntrySetIterator.html)

The last returned entry

[last()](http://docs.google.com/org/apache/commons/collections4/set/AbstractSortedSetDecorator.html#last--) - Method in class org.apache.commons.collections4.set.[AbstractSortedSetDecorator](http://docs.google.com/org/apache/commons/collections4/set/AbstractSortedSetDecorator.html)   [last()](http://docs.google.com/org/apache/commons/collections4/set/PredicatedSortedSet.html#last--) - Method in class org.apache.commons.collections4.set.[PredicatedSortedSet](http://docs.google.com/org/apache/commons/collections4/set/PredicatedSortedSet.html)   [last()](http://docs.google.com/org/apache/commons/collections4/set/TransformedSortedSet.html#last--) - Method in class org.apache.commons.collections4.set.[TransformedSortedSet](http://docs.google.com/org/apache/commons/collections4/set/TransformedSortedSet.html)   [last()](http://docs.google.com/org/apache/commons/collections4/SortedBag.html#last--) - Method in interface org.apache.commons.collections4.[SortedBag](http://docs.google.com/org/apache/commons/collections4/SortedBag.html)

Returns the last (highest) member.

[lastElement](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.UniqueSetIterator.html#lastElement) - Variable in class org.apache.commons.collections4.multiset.[AbstractMapMultiSet.UniqueSetIterator](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.UniqueSetIterator.html)

The last returned element

[lastIndexOf(Object)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#lastIndexOf-java.lang.Object-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)   [lastIndexOf(Object)](http://docs.google.com/org/apache/commons/collections4/list/AbstractListDecorator.html#lastIndexOf-java.lang.Object-) - Method in class org.apache.commons.collections4.list.[AbstractListDecorator](http://docs.google.com/org/apache/commons/collections4/list/AbstractListDecorator.html)   [lastIndexOf(Object)](http://docs.google.com/org/apache/commons/collections4/list/FixedSizeList.html#lastIndexOf-java.lang.Object-) - Method in class org.apache.commons.collections4.list.[FixedSizeList](http://docs.google.com/org/apache/commons/collections4/list/FixedSizeList.html)   [lastIndexOf(Object)](http://docs.google.com/org/apache/commons/collections4/list/PredicatedList.html#lastIndexOf-java.lang.Object-) - Method in class org.apache.commons.collections4.list.[PredicatedList](http://docs.google.com/org/apache/commons/collections4/list/PredicatedList.html)   [lastIndexOf(Object)](http://docs.google.com/org/apache/commons/collections4/list/TransformedList.html#lastIndexOf-java.lang.Object-) - Method in class org.apache.commons.collections4.list.[TransformedList](http://docs.google.com/org/apache/commons/collections4/list/TransformedList.html)   [lastKey](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.KeySetIterator.html#lastKey) - Variable in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.KeySetIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.KeySetIterator.html)

The last returned key

[lastKey()](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractOrderedBidiMapDecorator.html#lastKey--) - Method in class org.apache.commons.collections4.bidimap.[AbstractOrderedBidiMapDecorator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractOrderedBidiMapDecorator.html)   [lastKey()](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.html#lastKey--) - Method in class org.apache.commons.collections4.bidimap.[DualTreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.html)   [lastKey()](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html#lastKey--) - Method in class org.apache.commons.collections4.bidimap.[TreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html)

Gets the last (highest) key currently in this map.

[lastKey()](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html#lastKey--) - Method in class org.apache.commons.collections4.map.[AbstractLinkedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html)

Gets the last key in the map, which is the most recently inserted.

[lastKey()](http://docs.google.com/org/apache/commons/collections4/map/AbstractOrderedMapDecorator.html#lastKey--) - Method in class org.apache.commons.collections4.map.[AbstractOrderedMapDecorator](http://docs.google.com/org/apache/commons/collections4/map/AbstractOrderedMapDecorator.html)   [lastKey()](http://docs.google.com/org/apache/commons/collections4/map/AbstractSortedMapDecorator.html#lastKey--) - Method in class org.apache.commons.collections4.map.[AbstractSortedMapDecorator](http://docs.google.com/org/apache/commons/collections4/map/AbstractSortedMapDecorator.html)   [lastKey()](http://docs.google.com/org/apache/commons/collections4/map/LazySortedMap.html#lastKey--) - Method in class org.apache.commons.collections4.map.[LazySortedMap](http://docs.google.com/org/apache/commons/collections4/map/LazySortedMap.html)   [lastKey()](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html#lastKey--) - Method in class org.apache.commons.collections4.map.[ListOrderedMap](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html)

Gets the last key in this map by insert order.

[lastKey()](http://docs.google.com/org/apache/commons/collections4/map/PredicatedSortedMap.html#lastKey--) - Method in class org.apache.commons.collections4.map.[PredicatedSortedMap](http://docs.google.com/org/apache/commons/collections4/map/PredicatedSortedMap.html)   [lastKey()](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html#lastKey--) - Method in class org.apache.commons.collections4.map.[SingletonMap](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html)

Gets the last (and only) key in the map.

[lastKey()](http://docs.google.com/org/apache/commons/collections4/map/TransformedSortedMap.html#lastKey--) - Method in class org.apache.commons.collections4.map.[TransformedSortedMap](http://docs.google.com/org/apache/commons/collections4/map/TransformedSortedMap.html)   [lastKey()](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableSortedMap.html#lastKey--) - Method in class org.apache.commons.collections4.map.[UnmodifiableSortedMap](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableSortedMap.html)   [lastKey()](http://docs.google.com/org/apache/commons/collections4/OrderedMap.html#lastKey--) - Method in interface org.apache.commons.collections4.[OrderedMap](http://docs.google.com/org/apache/commons/collections4/OrderedMap.html)

Gets the last key currently in this map.

[lastKey()](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html#lastKey--) - Method in class org.apache.commons.collections4.trie.[UnmodifiableTrie](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html)   [lastValue](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.ValuesIterator.html#lastValue) - Variable in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.ValuesIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.ValuesIterator.html)

The last returned value

[LazyIteratorChain](http://docs.google.com/org/apache/commons/collections4/iterators/LazyIteratorChain.html)<[E](http://docs.google.com/org/apache/commons/collections4/iterators/LazyIteratorChain.html)> - Class in [org.apache.commons.collections4.iterators](http://docs.google.com/org/apache/commons/collections4/iterators/package-summary.html)

An LazyIteratorChain is an Iterator that wraps a number of Iterators in a lazy manner.

[LazyIteratorChain()](http://docs.google.com/org/apache/commons/collections4/iterators/LazyIteratorChain.html#LazyIteratorChain--) - Constructor for class org.apache.commons.collections4.iterators.[LazyIteratorChain](http://docs.google.com/org/apache/commons/collections4/iterators/LazyIteratorChain.html)   [LazyList](http://docs.google.com/org/apache/commons/collections4/list/LazyList.html)<[E](http://docs.google.com/org/apache/commons/collections4/list/LazyList.html)> - Class in [org.apache.commons.collections4.list](http://docs.google.com/org/apache/commons/collections4/list/package-summary.html)

Decorates another List to create objects in the list on demand.

[LazyList(List<E>, Factory<? extends E>)](http://docs.google.com/org/apache/commons/collections4/list/LazyList.html#LazyList-java.util.List-org.apache.commons.collections4.Factory-) - Constructor for class org.apache.commons.collections4.list.[LazyList](http://docs.google.com/org/apache/commons/collections4/list/LazyList.html)

Constructor that wraps (not copies).

[LazyList(List<E>, Transformer<Integer, ? extends E>)](http://docs.google.com/org/apache/commons/collections4/list/LazyList.html#LazyList-java.util.List-org.apache.commons.collections4.Transformer-) - Constructor for class org.apache.commons.collections4.list.[LazyList](http://docs.google.com/org/apache/commons/collections4/list/LazyList.html)

Constructor that wraps (not copies).

[lazyList(List<E>, Factory<? extends E>)](http://docs.google.com/org/apache/commons/collections4/list/LazyList.html#lazyList-java.util.List-org.apache.commons.collections4.Factory-) - Static method in class org.apache.commons.collections4.list.[LazyList](http://docs.google.com/org/apache/commons/collections4/list/LazyList.html)

Factory method to create a lazily instantiating list.

[lazyList(List<E>, Transformer<Integer, ? extends E>)](http://docs.google.com/org/apache/commons/collections4/list/LazyList.html#lazyList-java.util.List-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.list.[LazyList](http://docs.google.com/org/apache/commons/collections4/list/LazyList.html)

Transformer method to create a lazily instantiating list.

[lazyList(List<E>, Factory<? extends E>)](http://docs.google.com/org/apache/commons/collections4/ListUtils.html#lazyList-java.util.List-org.apache.commons.collections4.Factory-) - Static method in class org.apache.commons.collections4.[ListUtils](http://docs.google.com/org/apache/commons/collections4/ListUtils.html)

Returns a "lazy" list whose elements will be created on demand.

[lazyList(List<E>, Transformer<Integer, ? extends E>)](http://docs.google.com/org/apache/commons/collections4/ListUtils.html#lazyList-java.util.List-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.[ListUtils](http://docs.google.com/org/apache/commons/collections4/ListUtils.html)

Returns a "lazy" list whose elements will be created on demand.

[LazyMap](http://docs.google.com/org/apache/commons/collections4/map/LazyMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/LazyMap.html),[V](http://docs.google.com/org/apache/commons/collections4/map/LazyMap.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

Decorates another Map to create objects in the map on demand.

[LazyMap(Map<K, V>, Factory<? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/LazyMap.html#LazyMap-java.util.Map-org.apache.commons.collections4.Factory-) - Constructor for class org.apache.commons.collections4.map.[LazyMap](http://docs.google.com/org/apache/commons/collections4/map/LazyMap.html)

Constructor that wraps (not copies).

[LazyMap(Map<K, V>, Transformer<? super K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/LazyMap.html#LazyMap-java.util.Map-org.apache.commons.collections4.Transformer-) - Constructor for class org.apache.commons.collections4.map.[LazyMap](http://docs.google.com/org/apache/commons/collections4/map/LazyMap.html)

Constructor that wraps (not copies).

[lazyMap(Map<K, V>, Factory<? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/LazyMap.html#lazyMap-java.util.Map-org.apache.commons.collections4.Factory-) - Static method in class org.apache.commons.collections4.map.[LazyMap](http://docs.google.com/org/apache/commons/collections4/map/LazyMap.html)

Factory method to create a lazily instantiated map.

[lazyMap(Map<K, V>, Transformer<? super K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/LazyMap.html#lazyMap-java.util.Map-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.map.[LazyMap](http://docs.google.com/org/apache/commons/collections4/map/LazyMap.html)

Factory method to create a lazily instantiated map.

[lazyMap(Map<K, V>, Factory<? extends V>)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#lazyMap-java.util.Map-org.apache.commons.collections4.Factory-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Returns a "lazy" map whose values will be created on demand.

[lazyMap(Map<K, V>, Transformer<? super K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#lazyMap-java.util.Map-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Returns a "lazy" map whose values will be created on demand.

[LazySortedMap](http://docs.google.com/org/apache/commons/collections4/map/LazySortedMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/LazySortedMap.html),[V](http://docs.google.com/org/apache/commons/collections4/map/LazySortedMap.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

Decorates another SortedMap to create objects in the map on demand.

[LazySortedMap(SortedMap<K, V>, Factory<? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/LazySortedMap.html#LazySortedMap-java.util.SortedMap-org.apache.commons.collections4.Factory-) - Constructor for class org.apache.commons.collections4.map.[LazySortedMap](http://docs.google.com/org/apache/commons/collections4/map/LazySortedMap.html)

Constructor that wraps (not copies).

[LazySortedMap(SortedMap<K, V>, Transformer<? super K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/LazySortedMap.html#LazySortedMap-java.util.SortedMap-org.apache.commons.collections4.Transformer-) - Constructor for class org.apache.commons.collections4.map.[LazySortedMap](http://docs.google.com/org/apache/commons/collections4/map/LazySortedMap.html)

Constructor that wraps (not copies).

[lazySortedMap(SortedMap<K, V>, Factory<? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/LazySortedMap.html#lazySortedMap-java.util.SortedMap-org.apache.commons.collections4.Factory-) - Static method in class org.apache.commons.collections4.map.[LazySortedMap](http://docs.google.com/org/apache/commons/collections4/map/LazySortedMap.html)

Factory method to create a lazily instantiated sorted map.

[lazySortedMap(SortedMap<K, V>, Transformer<? super K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/LazySortedMap.html#lazySortedMap-java.util.SortedMap-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.map.[LazySortedMap](http://docs.google.com/org/apache/commons/collections4/map/LazySortedMap.html)

Factory method to create a lazily instantiated sorted map.

[lazySortedMap(SortedMap<K, V>, Factory<? extends V>)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#lazySortedMap-java.util.SortedMap-org.apache.commons.collections4.Factory-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Returns a "lazy" sorted map whose values will be created on demand.

[lazySortedMap(SortedMap<K, V>, Transformer<? super K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#lazySortedMap-java.util.SortedMap-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Returns a "lazy" sorted map whose values will be created on demand.

[LENGTH](http://docs.google.com/org/apache/commons/collections4/trie/analyzer/StringKeyAnalyzer.html#LENGTH) - Static variable in class org.apache.commons.collections4.trie.analyzer.[StringKeyAnalyzer](http://docs.google.com/org/apache/commons/collections4/trie/analyzer/StringKeyAnalyzer.html)

The number of bits per [Character](https://docs.oracle.com/javase/7/docs/api/java/lang/Character.html?is-external=true).

[lengthInBits(String)](http://docs.google.com/org/apache/commons/collections4/trie/analyzer/StringKeyAnalyzer.html#lengthInBits-java.lang.String-) - Method in class org.apache.commons.collections4.trie.analyzer.[StringKeyAnalyzer](http://docs.google.com/org/apache/commons/collections4/trie/analyzer/StringKeyAnalyzer.html)   [lengthInBits(K)](http://docs.google.com/org/apache/commons/collections4/trie/KeyAnalyzer.html#lengthInBits-K-) - Method in class org.apache.commons.collections4.trie.[KeyAnalyzer](http://docs.google.com/org/apache/commons/collections4/trie/KeyAnalyzer.html)

Returns the length of the Key in bits.

[limit(long)](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html#limit-long-) - Method in class org.apache.commons.collections4.[FluentIterable](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html)

Returns a new FluentIterable whose iterator will return at most the provided maximum number of elements from this iterable.

[LinkedListIterator(AbstractLinkedList<E>, int)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedListIterator.html#LinkedListIterator-org.apache.commons.collections4.list.AbstractLinkedList-int-) - Constructor for class org.apache.commons.collections4.list.[AbstractLinkedList.LinkedListIterator](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedListIterator.html)

Create a ListIterator for a list.

[LinkedMap](http://docs.google.com/org/apache/commons/collections4/map/LinkedMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/LinkedMap.html),[V](http://docs.google.com/org/apache/commons/collections4/map/LinkedMap.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

A Map implementation that maintains the order of the entries.

[LinkedMap()](http://docs.google.com/org/apache/commons/collections4/map/LinkedMap.html#LinkedMap--) - Constructor for class org.apache.commons.collections4.map.[LinkedMap](http://docs.google.com/org/apache/commons/collections4/map/LinkedMap.html)

Constructs a new empty map with default size and load factor.

[LinkedMap(int)](http://docs.google.com/org/apache/commons/collections4/map/LinkedMap.html#LinkedMap-int-) - Constructor for class org.apache.commons.collections4.map.[LinkedMap](http://docs.google.com/org/apache/commons/collections4/map/LinkedMap.html)

Constructs a new, empty map with the specified initial capacity.

[LinkedMap(int, float)](http://docs.google.com/org/apache/commons/collections4/map/LinkedMap.html#LinkedMap-int-float-) - Constructor for class org.apache.commons.collections4.map.[LinkedMap](http://docs.google.com/org/apache/commons/collections4/map/LinkedMap.html)

Constructs a new, empty map with the specified initial capacity and load factor.

[LinkedMap(Map<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/LinkedMap.html#LinkedMap-java.util.Map-) - Constructor for class org.apache.commons.collections4.map.[LinkedMap](http://docs.google.com/org/apache/commons/collections4/map/LinkedMap.html)

Constructor copying elements from another map.

[LinkedSubList(AbstractLinkedList<E>, int, int)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedSubList.html#LinkedSubList-org.apache.commons.collections4.list.AbstractLinkedList-int-int-) - Constructor for class org.apache.commons.collections4.list.[AbstractLinkedList.LinkedSubList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedSubList.html)   [LinkedSubListIterator(AbstractLinkedList.LinkedSubList<E>, int)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedSubListIterator.html#LinkedSubListIterator-org.apache.commons.collections4.list.AbstractLinkedList.LinkedSubList-int-) - Constructor for class org.apache.commons.collections4.list.[AbstractLinkedList.LinkedSubListIterator](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedSubListIterator.html)   [LinkEntry(AbstractHashedMap.HashEntry<K, V>, int, Object, V)](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkEntry.html#LinkEntry-org.apache.commons.collections4.map.AbstractHashedMap.HashEntry-int-java.lang.Object-V-) - Constructor for class org.apache.commons.collections4.map.[AbstractLinkedMap.LinkEntry](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkEntry.html)

Constructs a new entry.

[LinkIterator(AbstractLinkedMap<K, V>)](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkIterator.html#LinkIterator-org.apache.commons.collections4.map.AbstractLinkedMap-) - Constructor for class org.apache.commons.collections4.map.[AbstractLinkedMap.LinkIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkIterator.html)   [LinkMapIterator(AbstractLinkedMap<K, V>)](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkMapIterator.html#LinkMapIterator-org.apache.commons.collections4.map.AbstractLinkedMap-) - Constructor for class org.apache.commons.collections4.map.[AbstractLinkedMap.LinkMapIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkMapIterator.html)   [listIterator(int)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedSubList.html#listIterator-int-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList.LinkedSubList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedSubList.html)   [listIterator()](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#listIterator--) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)   [listIterator(int)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#listIterator-int-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)   [listIterator()](http://docs.google.com/org/apache/commons/collections4/list/AbstractListDecorator.html#listIterator--) - Method in class org.apache.commons.collections4.list.[AbstractListDecorator](http://docs.google.com/org/apache/commons/collections4/list/AbstractListDecorator.html)   [listIterator(int)](http://docs.google.com/org/apache/commons/collections4/list/AbstractListDecorator.html#listIterator-int-) - Method in class org.apache.commons.collections4.list.[AbstractListDecorator](http://docs.google.com/org/apache/commons/collections4/list/AbstractListDecorator.html)   [listIterator()](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.html#listIterator--) - Method in class org.apache.commons.collections4.list.[CursorableLinkedList](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.html)

Returns a cursor iterator that allows changes to the underlying list in parallel.

[listIterator(int)](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.html#listIterator-int-) - Method in class org.apache.commons.collections4.list.[CursorableLinkedList](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.html)

Returns a cursor iterator that allows changes to the underlying list in parallel.

[listIterator()](http://docs.google.com/org/apache/commons/collections4/list/FixedSizeList.html#listIterator--) - Method in class org.apache.commons.collections4.list.[FixedSizeList](http://docs.google.com/org/apache/commons/collections4/list/FixedSizeList.html)   [listIterator(int)](http://docs.google.com/org/apache/commons/collections4/list/FixedSizeList.html#listIterator-int-) - Method in class org.apache.commons.collections4.list.[FixedSizeList](http://docs.google.com/org/apache/commons/collections4/list/FixedSizeList.html)   [listIterator()](http://docs.google.com/org/apache/commons/collections4/list/PredicatedList.html#listIterator--) - Method in class org.apache.commons.collections4.list.[PredicatedList](http://docs.google.com/org/apache/commons/collections4/list/PredicatedList.html)   [listIterator(int)](http://docs.google.com/org/apache/commons/collections4/list/PredicatedList.html#listIterator-int-) - Method in class org.apache.commons.collections4.list.[PredicatedList](http://docs.google.com/org/apache/commons/collections4/list/PredicatedList.html)   [listIterator()](http://docs.google.com/org/apache/commons/collections4/list/SetUniqueList.html#listIterator--) - Method in class org.apache.commons.collections4.list.[SetUniqueList](http://docs.google.com/org/apache/commons/collections4/list/SetUniqueList.html)   [listIterator(int)](http://docs.google.com/org/apache/commons/collections4/list/SetUniqueList.html#listIterator-int-) - Method in class org.apache.commons.collections4.list.[SetUniqueList](http://docs.google.com/org/apache/commons/collections4/list/SetUniqueList.html)   [listIterator()](http://docs.google.com/org/apache/commons/collections4/list/TransformedList.html#listIterator--) - Method in class org.apache.commons.collections4.list.[TransformedList](http://docs.google.com/org/apache/commons/collections4/list/TransformedList.html)   [listIterator(int)](http://docs.google.com/org/apache/commons/collections4/list/TransformedList.html#listIterator-int-) - Method in class org.apache.commons.collections4.list.[TransformedList](http://docs.google.com/org/apache/commons/collections4/list/TransformedList.html)   [listIterator()](http://docs.google.com/org/apache/commons/collections4/list/TreeList.html#listIterator--) - Method in class org.apache.commons.collections4.list.[TreeList](http://docs.google.com/org/apache/commons/collections4/list/TreeList.html)

Gets a ListIterator over the list.

[listIterator(int)](http://docs.google.com/org/apache/commons/collections4/list/TreeList.html#listIterator-int-) - Method in class org.apache.commons.collections4.list.[TreeList](http://docs.google.com/org/apache/commons/collections4/list/TreeList.html)

Gets a ListIterator over the list.

[listIterator()](http://docs.google.com/org/apache/commons/collections4/list/UnmodifiableList.html#listIterator--) - Method in class org.apache.commons.collections4.list.[UnmodifiableList](http://docs.google.com/org/apache/commons/collections4/list/UnmodifiableList.html)   [listIterator(int)](http://docs.google.com/org/apache/commons/collections4/list/UnmodifiableList.html#listIterator-int-) - Method in class org.apache.commons.collections4.list.[UnmodifiableList](http://docs.google.com/org/apache/commons/collections4/list/UnmodifiableList.html)   [ListIteratorWrapper](http://docs.google.com/org/apache/commons/collections4/iterators/ListIteratorWrapper.html)<[E](http://docs.google.com/org/apache/commons/collections4/iterators/ListIteratorWrapper.html)> - Class in [org.apache.commons.collections4.iterators](http://docs.google.com/org/apache/commons/collections4/iterators/package-summary.html)

Converts an [Iterator](https://docs.oracle.com/javase/7/docs/api/java/util/Iterator.html?is-external=true) into a [ResettableListIterator](http://docs.google.com/org/apache/commons/collections4/ResettableListIterator.html).

[ListIteratorWrapper(Iterator<? extends E>)](http://docs.google.com/org/apache/commons/collections4/iterators/ListIteratorWrapper.html#ListIteratorWrapper-java.util.Iterator-) - Constructor for class org.apache.commons.collections4.iterators.[ListIteratorWrapper](http://docs.google.com/org/apache/commons/collections4/iterators/ListIteratorWrapper.html)

Constructs a new ListIteratorWrapper that will wrap the given iterator.

[ListOrderedMap](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html),[V](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

Decorates a Map to ensure that the order of addition is retained using a List to maintain order.

[ListOrderedMap()](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html#ListOrderedMap--) - Constructor for class org.apache.commons.collections4.map.[ListOrderedMap](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html)

Constructs a new empty ListOrderedMap that decorates a HashMap.

[ListOrderedMap(Map<K, V>)](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html#ListOrderedMap-java.util.Map-) - Constructor for class org.apache.commons.collections4.map.[ListOrderedMap](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html)

Constructor that wraps (not copies).

[listOrderedMap(Map<K, V>)](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html#listOrderedMap-java.util.Map-) - Static method in class org.apache.commons.collections4.map.[ListOrderedMap](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html)

Factory method to create an ordered map.

[ListOrderedSet](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html)<[E](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html)> - Class in [org.apache.commons.collections4.set](http://docs.google.com/org/apache/commons/collections4/set/package-summary.html)

Decorates another Set to ensure that the order of addition is retained and used by the iterator.

[ListOrderedSet()](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html#ListOrderedSet--) - Constructor for class org.apache.commons.collections4.set.[ListOrderedSet](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html)

Constructs a new empty ListOrderedSet using a HashSet and an ArrayList internally.

[ListOrderedSet(Set<E>)](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html#ListOrderedSet-java.util.Set-) - Constructor for class org.apache.commons.collections4.set.[ListOrderedSet](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html)

Constructor that wraps (not copies).

[ListOrderedSet(Set<E>, List<E>)](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html#ListOrderedSet-java.util.Set-java.util.List-) - Constructor for class org.apache.commons.collections4.set.[ListOrderedSet](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html)

Constructor that wraps (not copies) the Set and specifies the list to use.

[listOrderedSet(Set<E>, List<E>)](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html#listOrderedSet-java.util.Set-java.util.List-) - Static method in class org.apache.commons.collections4.set.[ListOrderedSet](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html)

Factory method to create an ordered set specifying the list and set to use.

[listOrderedSet(Set<E>)](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html#listOrderedSet-java.util.Set-) - Static method in class org.apache.commons.collections4.set.[ListOrderedSet](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html)

Factory method to create an ordered set.

[listOrderedSet(List<E>)](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html#listOrderedSet-java.util.List-) - Static method in class org.apache.commons.collections4.set.[ListOrderedSet](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html)

Factory method to create an ordered set using the supplied list to retain order.

[ListUtils](http://docs.google.com/org/apache/commons/collections4/ListUtils.html) - Class in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

Provides utility methods and decorators for [List](https://docs.oracle.com/javase/7/docs/api/java/util/List.html?is-external=true) instances.

[ListValuedMap](http://docs.google.com/org/apache/commons/collections4/ListValuedMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/ListValuedMap.html),[V](http://docs.google.com/org/apache/commons/collections4/ListValuedMap.html)> - Interface in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

Defines a map that holds a list of values against each key.

[load(ClassLoader, String)](http://docs.google.com/org/apache/commons/collections4/properties/AbstractPropertiesFactory.html#load-java.lang.ClassLoader-java.lang.String-) - Method in class org.apache.commons.collections4.properties.[AbstractPropertiesFactory](http://docs.google.com/org/apache/commons/collections4/properties/AbstractPropertiesFactory.html)

Creates and loads properties from the given file.

[load(File)](http://docs.google.com/org/apache/commons/collections4/properties/AbstractPropertiesFactory.html#load-java.io.File-) - Method in class org.apache.commons.collections4.properties.[AbstractPropertiesFactory](http://docs.google.com/org/apache/commons/collections4/properties/AbstractPropertiesFactory.html)

Creates and loads properties from the given file.

[load(InputStream)](http://docs.google.com/org/apache/commons/collections4/properties/AbstractPropertiesFactory.html#load-java.io.InputStream-) - Method in class org.apache.commons.collections4.properties.[AbstractPropertiesFactory](http://docs.google.com/org/apache/commons/collections4/properties/AbstractPropertiesFactory.html)

Creates and loads properties from the given input stream.

[load(Path)](http://docs.google.com/org/apache/commons/collections4/properties/AbstractPropertiesFactory.html#load-java.nio.file.Path-) - Method in class org.apache.commons.collections4.properties.[AbstractPropertiesFactory](http://docs.google.com/org/apache/commons/collections4/properties/AbstractPropertiesFactory.html)

Creates and loads properties from the given path.

[load(Reader)](http://docs.google.com/org/apache/commons/collections4/properties/AbstractPropertiesFactory.html#load-java.io.Reader-) - Method in class org.apache.commons.collections4.properties.[AbstractPropertiesFactory](http://docs.google.com/org/apache/commons/collections4/properties/AbstractPropertiesFactory.html)

Creates and loads properties from the given reader.

[load(String)](http://docs.google.com/org/apache/commons/collections4/properties/AbstractPropertiesFactory.html#load-java.lang.String-) - Method in class org.apache.commons.collections4.properties.[AbstractPropertiesFactory](http://docs.google.com/org/apache/commons/collections4/properties/AbstractPropertiesFactory.html)

Creates and loads properties from the given file name.

[load(URI)](http://docs.google.com/org/apache/commons/collections4/properties/AbstractPropertiesFactory.html#load-java.net.URI-) - Method in class org.apache.commons.collections4.properties.[AbstractPropertiesFactory](http://docs.google.com/org/apache/commons/collections4/properties/AbstractPropertiesFactory.html)

Creates and loads properties from the given URI.

[load(URL)](http://docs.google.com/org/apache/commons/collections4/properties/AbstractPropertiesFactory.html#load-java.net.URL-) - Method in class org.apache.commons.collections4.properties.[AbstractPropertiesFactory](http://docs.google.com/org/apache/commons/collections4/properties/AbstractPropertiesFactory.html)

Creates and loads properties from the given URL.

[lock](http://docs.google.com/org/apache/commons/collections4/collection/SynchronizedCollection.html#lock) - Variable in class org.apache.commons.collections4.collection.[SynchronizedCollection](http://docs.google.com/org/apache/commons/collections4/collection/SynchronizedCollection.html)

The object to lock on, needed for List/SortedSet views

[longestCommonSubsequence(List<E>, List<E>)](http://docs.google.com/org/apache/commons/collections4/ListUtils.html#longestCommonSubsequence-java.util.List-java.util.List-) - Static method in class org.apache.commons.collections4.[ListUtils](http://docs.google.com/org/apache/commons/collections4/ListUtils.html)

Returns the longest common subsequence (LCS) of two sequences (lists).

[longestCommonSubsequence(List<E>, List<E>, Equator<? super E>)](http://docs.google.com/org/apache/commons/collections4/ListUtils.html#longestCommonSubsequence-java.util.List-java.util.List-org.apache.commons.collections4.Equator-) - Static method in class org.apache.commons.collections4.[ListUtils](http://docs.google.com/org/apache/commons/collections4/ListUtils.html)

Returns the longest common subsequence (LCS) of two sequences (lists).

[longestCommonSubsequence(CharSequence, CharSequence)](http://docs.google.com/org/apache/commons/collections4/ListUtils.html#longestCommonSubsequence-java.lang.CharSequence-java.lang.CharSequence-) - Static method in class org.apache.commons.collections4.[ListUtils](http://docs.google.com/org/apache/commons/collections4/ListUtils.html)

Returns the longest common subsequence (LCS) of two [CharSequence](https://docs.oracle.com/javase/7/docs/api/java/lang/CharSequence.html?is-external=true) objects.

[loop()](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html#loop--) - Method in class org.apache.commons.collections4.[FluentIterable](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html)

Returns a new FluentIterable whose iterator will loop infinitely over the elements from this iterable.

[loopingIterable(Iterable<E>)](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#loopingIterable-java.lang.Iterable-) - Static method in class org.apache.commons.collections4.[IterableUtils](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html)

Returns a view of the given iterable which will cycle infinitely over its elements.

[LoopingIterator](http://docs.google.com/org/apache/commons/collections4/iterators/LoopingIterator.html)<[E](http://docs.google.com/org/apache/commons/collections4/iterators/LoopingIterator.html)> - Class in [org.apache.commons.collections4.iterators](http://docs.google.com/org/apache/commons/collections4/iterators/package-summary.html)

An Iterator that restarts when it reaches the end.

[LoopingIterator(Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/iterators/LoopingIterator.html#LoopingIterator-java.util.Collection-) - Constructor for class org.apache.commons.collections4.iterators.[LoopingIterator](http://docs.google.com/org/apache/commons/collections4/iterators/LoopingIterator.html)

Constructor that wraps a collection.

[loopingIterator(Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#loopingIterator-java.util.Collection-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets an iterator that loops continuously over the supplied collection.

[LoopingListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/LoopingListIterator.html)<[E](http://docs.google.com/org/apache/commons/collections4/iterators/LoopingListIterator.html)> - Class in [org.apache.commons.collections4.iterators](http://docs.google.com/org/apache/commons/collections4/iterators/package-summary.html)

A ListIterator that restarts when it reaches the end or when it reaches the beginning.

[LoopingListIterator(List<E>)](http://docs.google.com/org/apache/commons/collections4/iterators/LoopingListIterator.html#LoopingListIterator-java.util.List-) - Constructor for class org.apache.commons.collections4.iterators.[LoopingListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/LoopingListIterator.html)

Constructor that wraps a list.

[loopingListIterator(List<E>)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#loopingListIterator-java.util.List-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets an iterator that loops continuously over the supplied list.

[lower(E)](http://docs.google.com/org/apache/commons/collections4/set/AbstractNavigableSetDecorator.html#lower-E-) - Method in class org.apache.commons.collections4.set.[AbstractNavigableSetDecorator](http://docs.google.com/org/apache/commons/collections4/set/AbstractNavigableSetDecorator.html)   [lower(E)](http://docs.google.com/org/apache/commons/collections4/set/PredicatedNavigableSet.html#lower-E-) - Method in class org.apache.commons.collections4.set.[PredicatedNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/PredicatedNavigableSet.html)   [lower(E)](http://docs.google.com/org/apache/commons/collections4/set/TransformedNavigableSet.html#lower-E-) - Method in class org.apache.commons.collections4.set.[TransformedNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/TransformedNavigableSet.html)   [LRUMap](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html),[V](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

A Map implementation with a fixed maximum size which removes the least recently used entry if an entry is added when full.

[LRUMap()](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html#LRUMap--) - Constructor for class org.apache.commons.collections4.map.[LRUMap](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html)

Constructs a new empty map with a maximum size of 100.

[LRUMap(int)](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html#LRUMap-int-) - Constructor for class org.apache.commons.collections4.map.[LRUMap](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html)

Constructs a new, empty map with the specified maximum size.

[LRUMap(int, int)](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html#LRUMap-int-int-) - Constructor for class org.apache.commons.collections4.map.[LRUMap](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html)

Constructs a new, empty map with the specified maximum size.

[LRUMap(int, boolean)](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html#LRUMap-int-boolean-) - Constructor for class org.apache.commons.collections4.map.[LRUMap](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html)

Constructs a new, empty map with the specified maximum size.

[LRUMap(int, float)](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html#LRUMap-int-float-) - Constructor for class org.apache.commons.collections4.map.[LRUMap](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html)

Constructs a new, empty map with the specified max capacity and load factor.

[LRUMap(int, int, float)](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html#LRUMap-int-int-float-) - Constructor for class org.apache.commons.collections4.map.[LRUMap](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html)

Constructs a new, empty map with the specified max / initial capacity and load factor.

[LRUMap(int, float, boolean)](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html#LRUMap-int-float-boolean-) - Constructor for class org.apache.commons.collections4.map.[LRUMap](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html)

Constructs a new, empty map with the specified max capacity and load factor.

[LRUMap(int, int, float, boolean)](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html#LRUMap-int-int-float-boolean-) - Constructor for class org.apache.commons.collections4.map.[LRUMap](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html)

Constructs a new, empty map with the specified max / initial capacity and load factor.

[LRUMap(Map<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html#LRUMap-java.util.Map-) - Constructor for class org.apache.commons.collections4.map.[LRUMap](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html)

Constructor copying elements from another map.

[LRUMap(Map<? extends K, ? extends V>, boolean)](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html#LRUMap-java.util.Map-boolean-) - Constructor for class org.apache.commons.collections4.map.[LRUMap](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html)

Constructor copying elements from another map.

## M

[MapBackedSet](http://docs.google.com/org/apache/commons/collections4/set/MapBackedSet.html)<[E](http://docs.google.com/org/apache/commons/collections4/set/MapBackedSet.html),[V](http://docs.google.com/org/apache/commons/collections4/set/MapBackedSet.html)> - Class in [org.apache.commons.collections4.set](http://docs.google.com/org/apache/commons/collections4/set/package-summary.html)

Decorates a Map to obtain Set behaviour.

[mapBackedSet(Map<E, ? super V>)](http://docs.google.com/org/apache/commons/collections4/set/MapBackedSet.html#mapBackedSet-java.util.Map-) - Static method in class org.apache.commons.collections4.set.[MapBackedSet](http://docs.google.com/org/apache/commons/collections4/set/MapBackedSet.html)

Factory method to create a set from a map.

[mapBackedSet(Map<E, ? super V>, V)](http://docs.google.com/org/apache/commons/collections4/set/MapBackedSet.html#mapBackedSet-java.util.Map-V-) - Static method in class org.apache.commons.collections4.set.[MapBackedSet](http://docs.google.com/org/apache/commons/collections4/set/MapBackedSet.html)

Factory method to create a set from a map.

[MapEntry(Map.Entry<K, V>, AbstractDualBidiMap<K, V>)](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.MapEntry.html#MapEntry-java.util.Map.Entry-org.apache.commons.collections4.bidimap.AbstractDualBidiMap-) - Constructor for class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.MapEntry](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.MapEntry.html)

Constructor.

[mapIterator()](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractBidiMapDecorator.html#mapIterator--) - Method in class org.apache.commons.collections4.bidimap.[AbstractBidiMapDecorator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractBidiMapDecorator.html)   [mapIterator()](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html#mapIterator--) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html)

Obtains a MapIterator over the map.

[mapIterator()](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractOrderedBidiMapDecorator.html#mapIterator--) - Method in class org.apache.commons.collections4.bidimap.[AbstractOrderedBidiMapDecorator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractOrderedBidiMapDecorator.html)   [mapIterator()](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.html#mapIterator--) - Method in class org.apache.commons.collections4.bidimap.[DualTreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.html)

Obtains an ordered map iterator.

[mapIterator()](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html#mapIterator--) - Method in class org.apache.commons.collections4.bidimap.[TreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html)   [mapIterator()](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableBidiMap.html#mapIterator--) - Method in class org.apache.commons.collections4.bidimap.[UnmodifiableBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableBidiMap.html)   [mapIterator()](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableOrderedBidiMap.html#mapIterator--) - Method in class org.apache.commons.collections4.bidimap.[UnmodifiableOrderedBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableOrderedBidiMap.html)   [mapIterator()](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableSortedBidiMap.html#mapIterator--) - Method in class org.apache.commons.collections4.bidimap.[UnmodifiableSortedBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableSortedBidiMap.html)   [mapIterator()](http://docs.google.com/org/apache/commons/collections4/IterableGet.html#mapIterator--) - Method in interface org.apache.commons.collections4.[IterableGet](http://docs.google.com/org/apache/commons/collections4/IterableGet.html)

Obtains a MapIterator over the map.

[mapIterator()](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#mapIterator--) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Gets an iterator over the map.

[mapIterator()](http://docs.google.com/org/apache/commons/collections4/map/AbstractIterableMap.html#mapIterator--) - Method in class org.apache.commons.collections4.map.[AbstractIterableMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractIterableMap.html)

Obtains a MapIterator over the map.

[mapIterator()](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html#mapIterator--) - Method in class org.apache.commons.collections4.map.[AbstractLinkedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html)

Gets an iterator over the map.

[mapIterator()](http://docs.google.com/org/apache/commons/collections4/map/AbstractOrderedMapDecorator.html#mapIterator--) - Method in class org.apache.commons.collections4.map.[AbstractOrderedMapDecorator](http://docs.google.com/org/apache/commons/collections4/map/AbstractOrderedMapDecorator.html)   [mapIterator()](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html#mapIterator--) - Method in class org.apache.commons.collections4.map.[AbstractReferenceMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html)

Gets a MapIterator over the reference map.

[mapIterator()](http://docs.google.com/org/apache/commons/collections4/map/AbstractSortedMapDecorator.html#mapIterator--) - Method in class org.apache.commons.collections4.map.[AbstractSortedMapDecorator](http://docs.google.com/org/apache/commons/collections4/map/AbstractSortedMapDecorator.html)

Obtains a MapIterator over the map.

[mapIterator()](http://docs.google.com/org/apache/commons/collections4/map/Flat3Map.html#mapIterator--) - Method in class org.apache.commons.collections4.map.[Flat3Map](http://docs.google.com/org/apache/commons/collections4/map/Flat3Map.html)

Gets an iterator over the map.

[mapIterator()](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html#mapIterator--) - Method in class org.apache.commons.collections4.map.[ListOrderedMap](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html)   [mapIterator()](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html#mapIterator--) - Method in class org.apache.commons.collections4.map.[MultiKeyMap](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html)   [mapIterator()](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html#mapIterator--) - Method in class org.apache.commons.collections4.map.[SingletonMap](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html)

Obtains an OrderedMapIterator over the map.

[mapIterator()](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableMap.html#mapIterator--) - Method in class org.apache.commons.collections4.map.[UnmodifiableMap](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableMap.html)   [mapIterator()](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableOrderedMap.html#mapIterator--) - Method in class org.apache.commons.collections4.map.[UnmodifiableOrderedMap](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableOrderedMap.html)   [MapIterator](http://docs.google.com/org/apache/commons/collections4/MapIterator.html)<[K](http://docs.google.com/org/apache/commons/collections4/MapIterator.html),[V](http://docs.google.com/org/apache/commons/collections4/MapIterator.html)> - Interface in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

Defines an iterator that operates over a Map.

[mapIterator()](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html#mapIterator--) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html)   [mapIterator()](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html#mapIterator--) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMapDecorator](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html)   [mapIterator()](http://docs.google.com/org/apache/commons/collections4/multimap/UnmodifiableMultiValuedMap.html#mapIterator--) - Method in class org.apache.commons.collections4.multimap.[UnmodifiableMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/UnmodifiableMultiValuedMap.html)   [mapIterator()](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html#mapIterator--) - Method in interface org.apache.commons.collections4.[MultiValuedMap](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html)

Obtains a MapIterator over this multi-valued map.

[mapIterator()](http://docs.google.com/org/apache/commons/collections4/OrderedMap.html#mapIterator--) - Method in interface org.apache.commons.collections4.[OrderedMap](http://docs.google.com/org/apache/commons/collections4/OrderedMap.html)

Obtains an OrderedMapIterator over the map.

[mapIterator()](http://docs.google.com/org/apache/commons/collections4/splitmap/AbstractIterableGetMapDecorator.html#mapIterator--) - Method in class org.apache.commons.collections4.splitmap.[AbstractIterableGetMapDecorator](http://docs.google.com/org/apache/commons/collections4/splitmap/AbstractIterableGetMapDecorator.html)

Get a MapIterator over this Get.

[mapIterator()](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html#mapIterator--) - Method in class org.apache.commons.collections4.trie.[UnmodifiableTrie](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html)   [MapTransformer](http://docs.google.com/org/apache/commons/collections4/functors/MapTransformer.html)<[I](http://docs.google.com/org/apache/commons/collections4/functors/MapTransformer.html),[O](http://docs.google.com/org/apache/commons/collections4/functors/MapTransformer.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Transformer implementation that returns the value held in a specified map using the input parameter as a key.

[mapTransformer(Map<? super I, ? extends O>)](http://docs.google.com/org/apache/commons/collections4/functors/MapTransformer.html#mapTransformer-java.util.Map-) - Static method in class org.apache.commons.collections4.functors.[MapTransformer](http://docs.google.com/org/apache/commons/collections4/functors/MapTransformer.html)

Factory to create the transformer.

[mapTransformer(Map<? super I, ? extends O>)](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html#mapTransformer-java.util.Map-) - Static method in class org.apache.commons.collections4.[TransformerUtils](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html)

Creates a Transformer that uses the passed in Map to transform the input object (as a simple lookup).

[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html) - Class in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

Provides utility methods and decorators for [Map](https://docs.oracle.com/javase/7/docs/api/java/util/Map.html?is-external=true) and [SortedMap](https://docs.oracle.com/javase/7/docs/api/java/util/SortedMap.html?is-external=true) instances.

[matchesAll(Iterable<C>, Predicate<? super C>)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#matchesAll-java.lang.Iterable-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Deprecated.

since 4.1, use [IterableUtils.matchesAll(Iterable, Predicate)](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#matchesAll-java.lang.Iterable-org.apache.commons.collections4.Predicate-) instead

[matchesAll(Iterable<E>, Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#matchesAll-java.lang.Iterable-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[IterableUtils](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html)

Answers true if a predicate is true for every element of an iterable.

[matchesAll(Iterator<E>, Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#matchesAll-java.util.Iterator-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Answers true if a predicate is true for every element of an iterator.

[matchesAny(Iterable<E>, Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#matchesAny-java.lang.Iterable-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[IterableUtils](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html)

Answers true if a predicate is true for any element of the iterable.

[matchesAny(Iterator<E>, Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#matchesAny-java.util.Iterator-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Answers true if a predicate is true for any element of the iterator.

[max(E, E, Comparator<E>)](http://docs.google.com/org/apache/commons/collections4/ComparatorUtils.html#max-E-E-java.util.Comparator-) - Static method in class org.apache.commons.collections4.[ComparatorUtils](http://docs.google.com/org/apache/commons/collections4/ComparatorUtils.html)

Returns the larger of the given objects according to the given comparator, returning the second object if the comparator returns equal.

[MAXIMUM\_CAPACITY](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#MAXIMUM_CAPACITY) - Static variable in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

The maximum capacity allowed

[maxSize()](http://docs.google.com/org/apache/commons/collections4/BoundedCollection.html#maxSize--) - Method in interface org.apache.commons.collections4.[BoundedCollection](http://docs.google.com/org/apache/commons/collections4/BoundedCollection.html)

Gets the maximum size of the collection (the bound).

[maxSize()](http://docs.google.com/org/apache/commons/collections4/BoundedMap.html#maxSize--) - Method in interface org.apache.commons.collections4.[BoundedMap](http://docs.google.com/org/apache/commons/collections4/BoundedMap.html)

Gets the maximum size of the map (the bound).

[maxSize()](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableBoundedCollection.html#maxSize--) - Method in class org.apache.commons.collections4.collection.[UnmodifiableBoundedCollection](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableBoundedCollection.html)   [maxSize(Collection<? extends Object>)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#maxSize-java.util.Collection-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Get the maximum number of elements that the Collection can contain.

[maxSize()](http://docs.google.com/org/apache/commons/collections4/list/FixedSizeList.html#maxSize--) - Method in class org.apache.commons.collections4.list.[FixedSizeList](http://docs.google.com/org/apache/commons/collections4/list/FixedSizeList.html)   [maxSize()](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeMap.html#maxSize--) - Method in class org.apache.commons.collections4.map.[FixedSizeMap](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeMap.html)   [maxSize()](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeSortedMap.html#maxSize--) - Method in class org.apache.commons.collections4.map.[FixedSizeSortedMap](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeSortedMap.html)   [maxSize()](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html#maxSize--) - Method in class org.apache.commons.collections4.map.[LRUMap](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html)

Gets the maximum size of the map (the bound).

[maxSize()](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html#maxSize--) - Method in class org.apache.commons.collections4.map.[SingletonMap](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html)

Gets the maximum size of the map, always 1.

[maxSize()](http://docs.google.com/org/apache/commons/collections4/queue/CircularFifoQueue.html#maxSize--) - Method in class org.apache.commons.collections4.queue.[CircularFifoQueue](http://docs.google.com/org/apache/commons/collections4/queue/CircularFifoQueue.html)

Gets the maximum size of the collection (the bound).

[min(E, E, Comparator<E>)](http://docs.google.com/org/apache/commons/collections4/ComparatorUtils.html#min-E-E-java.util.Comparator-) - Static method in class org.apache.commons.collections4.[ComparatorUtils](http://docs.google.com/org/apache/commons/collections4/ComparatorUtils.html)

Returns the smaller of the given objects according to the given comparator, returning the second object if the comparator returns equal.

[moveToMRU(AbstractLinkedMap.LinkEntry<K, V>)](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html#moveToMRU-org.apache.commons.collections4.map.AbstractLinkedMap.LinkEntry-) - Method in class org.apache.commons.collections4.map.[LRUMap](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html)

Moves an entry to the MRU position at the end of the list.

[MultiKey](http://docs.google.com/org/apache/commons/collections4/keyvalue/MultiKey.html)<[K](http://docs.google.com/org/apache/commons/collections4/keyvalue/MultiKey.html)> - Class in [org.apache.commons.collections4.keyvalue](http://docs.google.com/org/apache/commons/collections4/keyvalue/package-summary.html)

A MultiKey allows multiple map keys to be merged together.

[MultiKey(K, K)](http://docs.google.com/org/apache/commons/collections4/keyvalue/MultiKey.html#MultiKey-K-K-) - Constructor for class org.apache.commons.collections4.keyvalue.[MultiKey](http://docs.google.com/org/apache/commons/collections4/keyvalue/MultiKey.html)

Constructor taking two keys.

[MultiKey(K, K, K)](http://docs.google.com/org/apache/commons/collections4/keyvalue/MultiKey.html#MultiKey-K-K-K-) - Constructor for class org.apache.commons.collections4.keyvalue.[MultiKey](http://docs.google.com/org/apache/commons/collections4/keyvalue/MultiKey.html)

Constructor taking three keys.

[MultiKey(K, K, K, K)](http://docs.google.com/org/apache/commons/collections4/keyvalue/MultiKey.html#MultiKey-K-K-K-K-) - Constructor for class org.apache.commons.collections4.keyvalue.[MultiKey](http://docs.google.com/org/apache/commons/collections4/keyvalue/MultiKey.html)

Constructor taking four keys.

[MultiKey(K, K, K, K, K)](http://docs.google.com/org/apache/commons/collections4/keyvalue/MultiKey.html#MultiKey-K-K-K-K-K-) - Constructor for class org.apache.commons.collections4.keyvalue.[MultiKey](http://docs.google.com/org/apache/commons/collections4/keyvalue/MultiKey.html)

Constructor taking five keys.

[MultiKey(K[])](http://docs.google.com/org/apache/commons/collections4/keyvalue/MultiKey.html#MultiKey-K:A-) - Constructor for class org.apache.commons.collections4.keyvalue.[MultiKey](http://docs.google.com/org/apache/commons/collections4/keyvalue/MultiKey.html)

Constructor taking an array of keys which is cloned.

[MultiKey(K[], boolean)](http://docs.google.com/org/apache/commons/collections4/keyvalue/MultiKey.html#MultiKey-K:A-boolean-) - Constructor for class org.apache.commons.collections4.keyvalue.[MultiKey](http://docs.google.com/org/apache/commons/collections4/keyvalue/MultiKey.html)

Constructor taking an array of keys, optionally choosing whether to clone.

[MultiKeyMap](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html),[V](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

A Map implementation that uses multiple keys to map the value.

[MultiKeyMap()](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html#MultiKeyMap--) - Constructor for class org.apache.commons.collections4.map.[MultiKeyMap](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html)

Constructs a new MultiKeyMap that decorates a HashedMap.

[MultiKeyMap(AbstractHashedMap<MultiKey<? extends K>, V>)](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html#MultiKeyMap-org.apache.commons.collections4.map.AbstractHashedMap-) - Constructor for class org.apache.commons.collections4.map.[MultiKeyMap](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html)

Constructor that decorates the specified map and is called from [MultiKeyMap.multiKeyMap(AbstractHashedMap)](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html#multiKeyMap-org.apache.commons.collections4.map.AbstractHashedMap-).

[multiKeyMap(AbstractHashedMap<MultiKey<? extends K>, V>)](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html#multiKeyMap-org.apache.commons.collections4.map.AbstractHashedMap-) - Static method in class org.apache.commons.collections4.map.[MultiKeyMap](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html)

Decorates the specified map to add the MultiKeyMap API and fast query.

[MultiMap](http://docs.google.com/org/apache/commons/collections4/MultiMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/MultiMap.html),[V](http://docs.google.com/org/apache/commons/collections4/MultiMap.html)> - Interface in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

Deprecated.

since 4.1, use [MultiValuedMap](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html) instead

[MultiMapUtils](http://docs.google.com/org/apache/commons/collections4/MultiMapUtils.html) - Class in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

Provides utility methods and decorators for [MultiValuedMap](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html) instances.

[MultiSet](http://docs.google.com/org/apache/commons/collections4/MultiSet.html)<[E](http://docs.google.com/org/apache/commons/collections4/MultiSet.html)> - Interface in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

Defines a collection that counts the number of times an object appears in the collection.

[MultiSet.Entry](http://docs.google.com/org/apache/commons/collections4/MultiSet.Entry.html)<[E](http://docs.google.com/org/apache/commons/collections4/MultiSet.Entry.html)> - Interface in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

An unmodifiable entry for an element and its occurrence as contained in a MultiSet.

[MultiSetEntry(Map.Entry<E, AbstractMapMultiSet.MutableInteger>)](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.MultiSetEntry.html#MultiSetEntry-java.util.Map.Entry-) - Constructor for class org.apache.commons.collections4.multiset.[AbstractMapMultiSet.MultiSetEntry](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.MultiSetEntry.html)

Constructor.

[MultiSetUtils](http://docs.google.com/org/apache/commons/collections4/MultiSetUtils.html) - Class in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

Provides utility methods and decorators for [MultiSet](http://docs.google.com/org/apache/commons/collections4/MultiSet.html) instances.

[MultiValuedMap](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html),[V](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html)> - Interface in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

Defines a map that holds a collection of values against each key.

[MultiValueMap](http://docs.google.com/org/apache/commons/collections4/map/MultiValueMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/MultiValueMap.html),[V](http://docs.google.com/org/apache/commons/collections4/map/MultiValueMap.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

Deprecated.

since 4.1, use [MultiValuedMap](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html) instead

[MultiValueMap()](http://docs.google.com/org/apache/commons/collections4/map/MultiValueMap.html#MultiValueMap--) - Constructor for class org.apache.commons.collections4.map.[MultiValueMap](http://docs.google.com/org/apache/commons/collections4/map/MultiValueMap.html)

Deprecated.

Creates a MultiValueMap based on a HashMap and storing the multiple values in an ArrayList.

[MultiValueMap(Map<K, ? super C>, Factory<C>)](http://docs.google.com/org/apache/commons/collections4/map/MultiValueMap.html#MultiValueMap-java.util.Map-org.apache.commons.collections4.Factory-) - Constructor for class org.apache.commons.collections4.map.[MultiValueMap](http://docs.google.com/org/apache/commons/collections4/map/MultiValueMap.html)

Deprecated.

Creates a MultiValueMap which decorates the given map and creates the value collections using the supplied collectionFactory.

[multiValueMap(Map<K, ? super Collection<V>>)](http://docs.google.com/org/apache/commons/collections4/map/MultiValueMap.html#multiValueMap-java.util.Map-) - Static method in class org.apache.commons.collections4.map.[MultiValueMap](http://docs.google.com/org/apache/commons/collections4/map/MultiValueMap.html)

Deprecated.

Creates a map which wraps the given map and maps keys to ArrayLists.

[multiValueMap(Map<K, ? super C>, Class<C>)](http://docs.google.com/org/apache/commons/collections4/map/MultiValueMap.html#multiValueMap-java.util.Map-java.lang.Class-) - Static method in class org.apache.commons.collections4.map.[MultiValueMap](http://docs.google.com/org/apache/commons/collections4/map/MultiValueMap.html)

Deprecated.

Creates a map which decorates the given map and maps keys to collections of type collectionClass.

[multiValueMap(Map<K, ? super C>, Factory<C>)](http://docs.google.com/org/apache/commons/collections4/map/MultiValueMap.html#multiValueMap-java.util.Map-org.apache.commons.collections4.Factory-) - Static method in class org.apache.commons.collections4.map.[MultiValueMap](http://docs.google.com/org/apache/commons/collections4/map/MultiValueMap.html)

Deprecated.

Creates a map which decorates the given map and creates the value collections using the supplied collectionFactory.

[multiValueMap(Map<K, ? super Collection<V>>)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#multiValueMap-java.util.Map-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Deprecated.

since 4.1, use [MultiValuedMap](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html) instead

[multiValueMap(Map<K, C>, Class<C>)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#multiValueMap-java.util.Map-java.lang.Class-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Deprecated.

since 4.1, use [MultiValuedMap](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html) instead

[multiValueMap(Map<K, C>, Factory<C>)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#multiValueMap-java.util.Map-org.apache.commons.collections4.Factory-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Deprecated.

since 4.1, use [MultiValuedMap](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html) instead

## N

[NATURAL\_COMPARATOR](http://docs.google.com/org/apache/commons/collections4/ComparatorUtils.html#NATURAL_COMPARATOR) - Static variable in class org.apache.commons.collections4.[ComparatorUtils](http://docs.google.com/org/apache/commons/collections4/ComparatorUtils.html)

Comparator for natural sort order.

[naturalComparator()](http://docs.google.com/org/apache/commons/collections4/ComparatorUtils.html#naturalComparator--) - Static method in class org.apache.commons.collections4.[ComparatorUtils](http://docs.google.com/org/apache/commons/collections4/ComparatorUtils.html)

Gets a comparator that uses the natural order of the objects.

[neitherPredicate(Predicate<? super T>, Predicate<? super T>)](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html#neitherPredicate-org.apache.commons.collections4.Predicate-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[PredicateUtils](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html)

Create a new Predicate that returns true if neither of the specified predicates are true.

[newIdentityHashSet()](http://docs.google.com/org/apache/commons/collections4/SetUtils.html#newIdentityHashSet--) - Static method in class org.apache.commons.collections4.[SetUtils](http://docs.google.com/org/apache/commons/collections4/SetUtils.html)

Returns a new hash set that matches elements based on == not equals().

[newListValuedHashMap()](http://docs.google.com/org/apache/commons/collections4/MultiMapUtils.html#newListValuedHashMap--) - Static method in class org.apache.commons.collections4.[MultiMapUtils](http://docs.google.com/org/apache/commons/collections4/MultiMapUtils.html)

Creates a [ListValuedMap](http://docs.google.com/org/apache/commons/collections4/ListValuedMap.html) with an [ArrayList](https://docs.oracle.com/javase/7/docs/api/java/util/ArrayList.html?is-external=true) as collection class to store the values mapped to a key.

[newSetValuedHashMap()](http://docs.google.com/org/apache/commons/collections4/MultiMapUtils.html#newSetValuedHashMap--) - Static method in class org.apache.commons.collections4.[MultiMapUtils](http://docs.google.com/org/apache/commons/collections4/MultiMapUtils.html)

Creates a [SetValuedMap](http://docs.google.com/org/apache/commons/collections4/SetValuedMap.html) with an [HashSet](https://docs.oracle.com/javase/7/docs/api/java/util/HashSet.html?is-external=true) as collection class to store the values mapped to a key.

[next()](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.BidiMapIterator.html#next--) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.BidiMapIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.BidiMapIterator.html)   [next()](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.EntrySetIterator.html#next--) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.EntrySetIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.EntrySetIterator.html)   [next()](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.KeySetIterator.html#next--) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.KeySetIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.KeySetIterator.html)   [next()](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.ValuesIterator.html#next--) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.ValuesIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.ValuesIterator.html)   [next()](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.BidiOrderedMapIterator.html#next--) - Method in class org.apache.commons.collections4.bidimap.[DualTreeBidiMap.BidiOrderedMapIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.BidiOrderedMapIterator.html)   [next()](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractIteratorDecorator.html#next--) - Method in class org.apache.commons.collections4.iterators.[AbstractIteratorDecorator](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractIteratorDecorator.html) [next()](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractListIteratorDecorator.html#next--) - Method in class org.apache.commons.collections4.iterators.[AbstractListIteratorDecorator](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractListIteratorDecorator.html) [next()](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractMapIteratorDecorator.html#next--) - Method in class org.apache.commons.collections4.iterators.[AbstractMapIteratorDecorator](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractMapIteratorDecorator.html)

Gets the next *key* from the Map.

[next()](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractOrderedMapIteratorDecorator.html#next--) - Method in class org.apache.commons.collections4.iterators.[AbstractOrderedMapIteratorDecorator](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractOrderedMapIteratorDecorator.html)

Gets the next *key* from the Map.

[next()](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayIterator.html#next--) - Method in class org.apache.commons.collections4.iterators.[ArrayIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayIterator.html)

Returns the next element in the array.

[next()](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayListIterator.html#next--) - Method in class org.apache.commons.collections4.iterators.[ArrayListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayListIterator.html)

Gets the next element from the array.

[next()](http://docs.google.com/org/apache/commons/collections4/iterators/BoundedIterator.html#next--) - Method in class org.apache.commons.collections4.iterators.[BoundedIterator](http://docs.google.com/org/apache/commons/collections4/iterators/BoundedIterator.html)   [next()](http://docs.google.com/org/apache/commons/collections4/iterators/CollatingIterator.html#next--) - Method in class org.apache.commons.collections4.iterators.[CollatingIterator](http://docs.google.com/org/apache/commons/collections4/iterators/CollatingIterator.html)

Returns the next ordered element from a child iterator.

[next()](http://docs.google.com/org/apache/commons/collections4/iterators/EntrySetMapIterator.html#next--) - Method in class org.apache.commons.collections4.iterators.[EntrySetMapIterator](http://docs.google.com/org/apache/commons/collections4/iterators/EntrySetMapIterator.html)

Gets the next *key* from the Map.

[next()](http://docs.google.com/org/apache/commons/collections4/iterators/EnumerationIterator.html#next--) - Method in class org.apache.commons.collections4.iterators.[EnumerationIterator](http://docs.google.com/org/apache/commons/collections4/iterators/EnumerationIterator.html)

Returns the next object from the enumeration.

[next()](http://docs.google.com/org/apache/commons/collections4/iterators/FilterIterator.html#next--) - Method in class org.apache.commons.collections4.iterators.[FilterIterator](http://docs.google.com/org/apache/commons/collections4/iterators/FilterIterator.html)

Returns the next object that matches the predicate.

[next()](http://docs.google.com/org/apache/commons/collections4/iterators/FilterListIterator.html#next--) - Method in class org.apache.commons.collections4.iterators.[FilterListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/FilterListIterator.html)   [next()](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorChain.html#next--) - Method in class org.apache.commons.collections4.iterators.[IteratorChain](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorChain.html)

Returns the next Object of the current Iterator

[next()](http://docs.google.com/org/apache/commons/collections4/iterators/LazyIteratorChain.html#next--) - Method in class org.apache.commons.collections4.iterators.[LazyIteratorChain](http://docs.google.com/org/apache/commons/collections4/iterators/LazyIteratorChain.html)

Returns the next element of the current Iterator

[next()](http://docs.google.com/org/apache/commons/collections4/iterators/ListIteratorWrapper.html#next--) - Method in class org.apache.commons.collections4.iterators.[ListIteratorWrapper](http://docs.google.com/org/apache/commons/collections4/iterators/ListIteratorWrapper.html)

Returns the next element from the iterator.

[next()](http://docs.google.com/org/apache/commons/collections4/iterators/LoopingIterator.html#next--) - Method in class org.apache.commons.collections4.iterators.[LoopingIterator](http://docs.google.com/org/apache/commons/collections4/iterators/LoopingIterator.html)

Returns the next object in the collection.

[next()](http://docs.google.com/org/apache/commons/collections4/iterators/LoopingListIterator.html#next--) - Method in class org.apache.commons.collections4.iterators.[LoopingListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/LoopingListIterator.html)

Returns the next object in the list.

[next()](http://docs.google.com/org/apache/commons/collections4/iterators/NodeListIterator.html#next--) - Method in class org.apache.commons.collections4.iterators.[NodeListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/NodeListIterator.html)   [next()](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayIterator.html#next--) - Method in class org.apache.commons.collections4.iterators.[ObjectArrayIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayIterator.html)

Returns the next element in the array.

[next()](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayListIterator.html#next--) - Method in class org.apache.commons.collections4.iterators.[ObjectArrayListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayListIterator.html)

Gets the next element from the array.

[next()](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectGraphIterator.html#next--) - Method in class org.apache.commons.collections4.iterators.[ObjectGraphIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectGraphIterator.html)

Gets the next element of the iteration.

[next()](http://docs.google.com/org/apache/commons/collections4/iterators/PeekingIterator.html#next--) - Method in class org.apache.commons.collections4.iterators.[PeekingIterator](http://docs.google.com/org/apache/commons/collections4/iterators/PeekingIterator.html)   [next()](http://docs.google.com/org/apache/commons/collections4/iterators/PermutationIterator.html#next--) - Method in class org.apache.commons.collections4.iterators.[PermutationIterator](http://docs.google.com/org/apache/commons/collections4/iterators/PermutationIterator.html)

Returns the next permutation of the input collection.

[next()](http://docs.google.com/org/apache/commons/collections4/iterators/PushbackIterator.html#next--) - Method in class org.apache.commons.collections4.iterators.[PushbackIterator](http://docs.google.com/org/apache/commons/collections4/iterators/PushbackIterator.html)   [next()](http://docs.google.com/org/apache/commons/collections4/iterators/ReverseListIterator.html#next--) - Method in class org.apache.commons.collections4.iterators.[ReverseListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ReverseListIterator.html)

Gets the next element.

[next()](http://docs.google.com/org/apache/commons/collections4/iterators/SingletonIterator.html#next--) - Method in class org.apache.commons.collections4.iterators.[SingletonIterator](http://docs.google.com/org/apache/commons/collections4/iterators/SingletonIterator.html)

Get the next object from the iterator.

[next()](http://docs.google.com/org/apache/commons/collections4/iterators/SingletonListIterator.html#next--) - Method in class org.apache.commons.collections4.iterators.[SingletonListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/SingletonListIterator.html)

Get the next object from the iterator.

[next()](http://docs.google.com/org/apache/commons/collections4/iterators/SkippingIterator.html#next--) - Method in class org.apache.commons.collections4.iterators.[SkippingIterator](http://docs.google.com/org/apache/commons/collections4/iterators/SkippingIterator.html)   [next()](http://docs.google.com/org/apache/commons/collections4/iterators/TransformIterator.html#next--) - Method in class org.apache.commons.collections4.iterators.[TransformIterator](http://docs.google.com/org/apache/commons/collections4/iterators/TransformIterator.html)

Gets the next object from the iteration, transforming it using the current transformer.

[next()](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableIterator.html#next--) - Method in class org.apache.commons.collections4.iterators.[UnmodifiableIterator](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableIterator.html)   [next()](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableListIterator.html#next--) - Method in class org.apache.commons.collections4.iterators.[UnmodifiableListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableListIterator.html)   [next()](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableMapIterator.html#next--) - Method in class org.apache.commons.collections4.iterators.[UnmodifiableMapIterator](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableMapIterator.html)   [next()](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableOrderedMapIterator.html#next--) - Method in class org.apache.commons.collections4.iterators.[UnmodifiableOrderedMapIterator](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableOrderedMapIterator.html)   [next()](http://docs.google.com/org/apache/commons/collections4/iterators/ZippingIterator.html#next--) - Method in class org.apache.commons.collections4.iterators.[ZippingIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ZippingIterator.html)

Returns the next element from a child iterator.

[next](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedListIterator.html#next) - Variable in class org.apache.commons.collections4.list.[AbstractLinkedList.LinkedListIterator](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedListIterator.html)

The node that will be returned by [AbstractLinkedList.LinkedListIterator.next()](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedListIterator.html#next--).

[next()](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedListIterator.html#next--) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList.LinkedListIterator](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedListIterator.html)   [next](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.Node.html#next) - Variable in class org.apache.commons.collections4.list.[AbstractLinkedList.Node](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.Node.html)

A pointer to the node after this node

[next()](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.EntrySetIterator.html#next--) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap.EntrySetIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.EntrySetIterator.html)   [next](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html#next) - Variable in class org.apache.commons.collections4.map.[AbstractHashedMap.HashEntry](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html)

The next entry in the hash chain

[next()](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashMapIterator.html#next--) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap.HashMapIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashMapIterator.html)   [next()](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySetIterator.html#next--) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap.KeySetIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySetIterator.html)   [next()](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.ValuesIterator.html#next--) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap.ValuesIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.ValuesIterator.html)   [next()](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.EntrySetIterator.html#next--) - Method in class org.apache.commons.collections4.map.[AbstractLinkedMap.EntrySetIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.EntrySetIterator.html)   [next()](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.KeySetIterator.html#next--) - Method in class org.apache.commons.collections4.map.[AbstractLinkedMap.KeySetIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.KeySetIterator.html)   [next](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkIterator.html#next) - Variable in class org.apache.commons.collections4.map.[AbstractLinkedMap.LinkIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkIterator.html)

The next entry

[next()](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkMapIterator.html#next--) - Method in class org.apache.commons.collections4.map.[AbstractLinkedMap.LinkMapIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkMapIterator.html)   [next()](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.ValuesIterator.html#next--) - Method in class org.apache.commons.collections4.map.[AbstractLinkedMap.ValuesIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.ValuesIterator.html)   [next()](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html#next--) - Method in class org.apache.commons.collections4.map.[AbstractReferenceMap.ReferenceEntry](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html)

Gets the next entry in the bucket.

[next()](http://docs.google.com/org/apache/commons/collections4/map/EntrySetToMapIteratorAdapter.html#next--) - Method in class org.apache.commons.collections4.map.[EntrySetToMapIteratorAdapter](http://docs.google.com/org/apache/commons/collections4/map/EntrySetToMapIteratorAdapter.html)

Gets the next *key* from the Map.

[next()](http://docs.google.com/org/apache/commons/collections4/MapIterator.html#next--) - Method in interface org.apache.commons.collections4.[MapIterator](http://docs.google.com/org/apache/commons/collections4/MapIterator.html)

Gets the next *key* from the Map.

[next()](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.EntrySetIterator.html#next--) - Method in class org.apache.commons.collections4.multiset.[AbstractMapMultiSet.EntrySetIterator](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.EntrySetIterator.html)   [next()](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.UniqueSetIterator.html#next--) - Method in class org.apache.commons.collections4.multiset.[AbstractMapMultiSet.UniqueSetIterator](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.UniqueSetIterator.html)   [nextElement()](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorEnumeration.html#nextElement--) - Method in class org.apache.commons.collections4.iterators.[IteratorEnumeration](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorEnumeration.html)

Returns the next element from the underlying iterator.

[nextEntry()](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashIterator.html#nextEntry--) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap.HashIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashIterator.html)   [nextEntry()](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkIterator.html#nextEntry--) - Method in class org.apache.commons.collections4.map.[AbstractLinkedMap.LinkIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkIterator.html)   [nextIndex()](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractListIteratorDecorator.html#nextIndex--) - Method in class org.apache.commons.collections4.iterators.[AbstractListIteratorDecorator](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractListIteratorDecorator.html) [nextIndex()](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayListIterator.html#nextIndex--) - Method in class org.apache.commons.collections4.iterators.[ArrayListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayListIterator.html)

Gets the next index to be retrieved.

[nextIndex()](http://docs.google.com/org/apache/commons/collections4/iterators/FilterListIterator.html#nextIndex--) - Method in class org.apache.commons.collections4.iterators.[FilterListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/FilterListIterator.html)   [nextIndex()](http://docs.google.com/org/apache/commons/collections4/iterators/ListIteratorWrapper.html#nextIndex--) - Method in class org.apache.commons.collections4.iterators.[ListIteratorWrapper](http://docs.google.com/org/apache/commons/collections4/iterators/ListIteratorWrapper.html)

Returns the index of the next element.

[nextIndex()](http://docs.google.com/org/apache/commons/collections4/iterators/LoopingListIterator.html#nextIndex--) - Method in class org.apache.commons.collections4.iterators.[LoopingListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/LoopingListIterator.html)

Returns the index of the element that would be returned by a subsequent call to [LoopingListIterator.next()](http://docs.google.com/org/apache/commons/collections4/iterators/LoopingListIterator.html#next--).

[nextIndex()](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayListIterator.html#nextIndex--) - Method in class org.apache.commons.collections4.iterators.[ObjectArrayListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayListIterator.html)

Gets the next index to be retrieved.

[nextIndex()](http://docs.google.com/org/apache/commons/collections4/iterators/ReverseListIterator.html#nextIndex--) - Method in class org.apache.commons.collections4.iterators.[ReverseListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ReverseListIterator.html)

Gets the index of the next element.

[nextIndex()](http://docs.google.com/org/apache/commons/collections4/iterators/SingletonListIterator.html#nextIndex--) - Method in class org.apache.commons.collections4.iterators.[SingletonListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/SingletonListIterator.html)

Returns the index of the element that would be returned by a subsequent call to next.

[nextIndex()](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableListIterator.html#nextIndex--) - Method in class org.apache.commons.collections4.iterators.[UnmodifiableListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableListIterator.html)   [nextIndex](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedListIterator.html#nextIndex) - Variable in class org.apache.commons.collections4.list.[AbstractLinkedList.LinkedListIterator](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedListIterator.html)

The index of [AbstractLinkedList.LinkedListIterator.next](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedListIterator.html#next).

[nextIndex()](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedListIterator.html#nextIndex--) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList.LinkedListIterator](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedListIterator.html)   [nextIndex()](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedSubListIterator.html#nextIndex--) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList.LinkedSubListIterator](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedSubListIterator.html)   [nextIndex()](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.Cursor.html#nextIndex--) - Method in class org.apache.commons.collections4.list.[CursorableLinkedList.Cursor](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.Cursor.html)

Gets the index of the next element to be returned.

[nextIndex()](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.SubCursor.html#nextIndex--) - Method in class org.apache.commons.collections4.list.[CursorableLinkedList.SubCursor](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.SubCursor.html)   [nextIterator(int)](http://docs.google.com/org/apache/commons/collections4/iterators/LazyIteratorChain.html#nextIterator-int-) - Method in class org.apache.commons.collections4.iterators.[LazyIteratorChain](http://docs.google.com/org/apache/commons/collections4/iterators/LazyIteratorChain.html)

Gets the next iterator after the previous one has been exhausted.

[nextKey(K)](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractOrderedBidiMapDecorator.html#nextKey-K-) - Method in class org.apache.commons.collections4.bidimap.[AbstractOrderedBidiMapDecorator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractOrderedBidiMapDecorator.html)   [nextKey(K)](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.html#nextKey-K-) - Method in class org.apache.commons.collections4.bidimap.[DualTreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.html)   [nextKey(K)](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.ViewMap.html#nextKey-K-) - Method in class org.apache.commons.collections4.bidimap.[DualTreeBidiMap.ViewMap](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.ViewMap.html)   [nextKey(K)](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html#nextKey-K-) - Method in class org.apache.commons.collections4.bidimap.[TreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html)

Gets the next key after the one specified.

[nextKey(Object)](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html#nextKey-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[AbstractLinkedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html)

Gets the next key in sequence.

[nextKey(K)](http://docs.google.com/org/apache/commons/collections4/map/AbstractOrderedMapDecorator.html#nextKey-K-) - Method in class org.apache.commons.collections4.map.[AbstractOrderedMapDecorator](http://docs.google.com/org/apache/commons/collections4/map/AbstractOrderedMapDecorator.html)   [nextKey(K)](http://docs.google.com/org/apache/commons/collections4/map/AbstractSortedMapDecorator.html#nextKey-K-) - Method in class org.apache.commons.collections4.map.[AbstractSortedMapDecorator](http://docs.google.com/org/apache/commons/collections4/map/AbstractSortedMapDecorator.html)   [nextKey(Object)](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html#nextKey-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[ListOrderedMap](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html)

Gets the next key to the one specified using insert order.

[nextKey(K)](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html#nextKey-K-) - Method in class org.apache.commons.collections4.map.[SingletonMap](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html)

Gets the next key after the key specified, always null.

[nextKey(K)](http://docs.google.com/org/apache/commons/collections4/OrderedMap.html#nextKey-K-) - Method in interface org.apache.commons.collections4.[OrderedMap](http://docs.google.com/org/apache/commons/collections4/OrderedMap.html)

Gets the next key after the one specified.

[nextKey(K)](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html#nextKey-K-) - Method in class org.apache.commons.collections4.trie.[UnmodifiableTrie](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html)   [NO\_NEXT\_ENTRY](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#NO_NEXT_ENTRY) - Static variable in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)   [NO\_PREVIOUS\_ENTRY](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#NO_PREVIOUS_ENTRY) - Static variable in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)   [Node()](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.Node.html#Node--) - Constructor for class org.apache.commons.collections4.list.[AbstractLinkedList.Node](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.Node.html)

Constructs a new header node.

[Node(E)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.Node.html#Node-E-) - Constructor for class org.apache.commons.collections4.list.[AbstractLinkedList.Node](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.Node.html)

Constructs a new node.

[Node(AbstractLinkedList.Node<E>, AbstractLinkedList.Node<E>, E)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.Node.html#Node-org.apache.commons.collections4.list.AbstractLinkedList.Node-org.apache.commons.collections4.list.AbstractLinkedList.Node-E-) - Constructor for class org.apache.commons.collections4.list.[AbstractLinkedList.Node](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.Node.html)

Constructs a new node.

[NodeCachingLinkedList](http://docs.google.com/org/apache/commons/collections4/list/NodeCachingLinkedList.html)<[E](http://docs.google.com/org/apache/commons/collections4/list/NodeCachingLinkedList.html)> - Class in [org.apache.commons.collections4.list](http://docs.google.com/org/apache/commons/collections4/list/package-summary.html)

A List implementation that stores a cache of internal Node objects in an effort to reduce wasteful object creation.

[NodeCachingLinkedList()](http://docs.google.com/org/apache/commons/collections4/list/NodeCachingLinkedList.html#NodeCachingLinkedList--) - Constructor for class org.apache.commons.collections4.list.[NodeCachingLinkedList](http://docs.google.com/org/apache/commons/collections4/list/NodeCachingLinkedList.html)

Constructor that creates.

[NodeCachingLinkedList(Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/list/NodeCachingLinkedList.html#NodeCachingLinkedList-java.util.Collection-) - Constructor for class org.apache.commons.collections4.list.[NodeCachingLinkedList](http://docs.google.com/org/apache/commons/collections4/list/NodeCachingLinkedList.html)

Constructor that copies the specified collection

[NodeCachingLinkedList(int)](http://docs.google.com/org/apache/commons/collections4/list/NodeCachingLinkedList.html#NodeCachingLinkedList-int-) - Constructor for class org.apache.commons.collections4.list.[NodeCachingLinkedList](http://docs.google.com/org/apache/commons/collections4/list/NodeCachingLinkedList.html)

Constructor that species the maximum cache size.

[nodeChanged(AbstractLinkedList.Node<E>)](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.Cursor.html#nodeChanged-org.apache.commons.collections4.list.AbstractLinkedList.Node-) - Method in class org.apache.commons.collections4.list.[CursorableLinkedList.Cursor](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.Cursor.html)

Handle event from the list when a node has changed.

[nodeInserted(AbstractLinkedList.Node<E>)](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.Cursor.html#nodeInserted-org.apache.commons.collections4.list.AbstractLinkedList.Node-) - Method in class org.apache.commons.collections4.list.[CursorableLinkedList.Cursor](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.Cursor.html)

Handle event from the list when a node has been added.

[NodeListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/NodeListIterator.html) - Class in [org.apache.commons.collections4.iterators](http://docs.google.com/org/apache/commons/collections4/iterators/package-summary.html)

An [Iterator](https://docs.oracle.com/javase/7/docs/api/java/util/Iterator.html?is-external=true) over a [NodeList](https://docs.oracle.com/javase/7/docs/api/org/w3c/dom/NodeList.html?is-external=true).

[NodeListIterator(Node)](http://docs.google.com/org/apache/commons/collections4/iterators/NodeListIterator.html#NodeListIterator-org.w3c.dom.Node-) - Constructor for class org.apache.commons.collections4.iterators.[NodeListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/NodeListIterator.html)

Convenience constructor, which creates a new NodeListIterator from the specified node's childNodes.

[NodeListIterator(NodeList)](http://docs.google.com/org/apache/commons/collections4/iterators/NodeListIterator.html#NodeListIterator-org.w3c.dom.NodeList-) - Constructor for class org.apache.commons.collections4.iterators.[NodeListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/NodeListIterator.html)

Constructor, that creates a new NodeListIterator from the specified org.w3c.NodeList

[nodeListIterator(NodeList)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#nodeListIterator-org.w3c.dom.NodeList-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets an [Iterator](https://docs.oracle.com/javase/7/docs/api/java/util/Iterator.html?is-external=true) that wraps the specified [NodeList](https://docs.oracle.com/javase/7/docs/api/org/w3c/dom/NodeList.html?is-external=true).

[nodeListIterator(Node)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#nodeListIterator-org.w3c.dom.Node-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets an [Iterator](https://docs.oracle.com/javase/7/docs/api/java/util/Iterator.html?is-external=true) that wraps the specified node's childNodes.

[nodeRemoved(AbstractLinkedList.Node<E>)](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.Cursor.html#nodeRemoved-org.apache.commons.collections4.list.AbstractLinkedList.Node-) - Method in class org.apache.commons.collections4.list.[CursorableLinkedList.Cursor](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.Cursor.html)

Handle event from the list when a node has been removed.

[NonePredicate](http://docs.google.com/org/apache/commons/collections4/functors/NonePredicate.html)<[T](http://docs.google.com/org/apache/commons/collections4/functors/NonePredicate.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Predicate implementation that returns true if none of the predicates return true.

[NonePredicate(Predicate<? super T>...)](http://docs.google.com/org/apache/commons/collections4/functors/NonePredicate.html#NonePredicate-org.apache.commons.collections4.Predicate...-) - Constructor for class org.apache.commons.collections4.functors.[NonePredicate](http://docs.google.com/org/apache/commons/collections4/functors/NonePredicate.html)

Constructor that performs no validation.

[nonePredicate(Predicate<? super T>...)](http://docs.google.com/org/apache/commons/collections4/functors/NonePredicate.html#nonePredicate-org.apache.commons.collections4.Predicate...-) - Static method in class org.apache.commons.collections4.functors.[NonePredicate](http://docs.google.com/org/apache/commons/collections4/functors/NonePredicate.html)

Factory to create the predicate.

[nonePredicate(Collection<? extends Predicate<? super T>>)](http://docs.google.com/org/apache/commons/collections4/functors/NonePredicate.html#nonePredicate-java.util.Collection-) - Static method in class org.apache.commons.collections4.functors.[NonePredicate](http://docs.google.com/org/apache/commons/collections4/functors/NonePredicate.html)

Factory to create the predicate.

[nonePredicate(Predicate<? super T>...)](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html#nonePredicate-org.apache.commons.collections4.Predicate...-) - Static method in class org.apache.commons.collections4.[PredicateUtils](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html)

Create a new Predicate that returns true if none of the specified predicates are true.

[nonePredicate(Collection<? extends Predicate<? super T>>)](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html#nonePredicate-java.util.Collection-) - Static method in class org.apache.commons.collections4.[PredicateUtils](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html)

Create a new Predicate that returns true if none of the specified predicates are true.

[nonUniqueIndexedCollection(Collection<C>, Transformer<C, K>)](http://docs.google.com/org/apache/commons/collections4/collection/IndexedCollection.html#nonUniqueIndexedCollection-java.util.Collection-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.collection.[IndexedCollection](http://docs.google.com/org/apache/commons/collections4/collection/IndexedCollection.html)

Create an [IndexedCollection](http://docs.google.com/org/apache/commons/collections4/collection/IndexedCollection.html) for a non-unique index.

[nopClosure()](http://docs.google.com/org/apache/commons/collections4/ClosureUtils.html#nopClosure--) - Static method in class org.apache.commons.collections4.[ClosureUtils](http://docs.google.com/org/apache/commons/collections4/ClosureUtils.html)

Gets a Closure that will do nothing.

[NOPClosure](http://docs.google.com/org/apache/commons/collections4/functors/NOPClosure.html)<[E](http://docs.google.com/org/apache/commons/collections4/functors/NOPClosure.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Closure implementation that does nothing.

[nopClosure()](http://docs.google.com/org/apache/commons/collections4/functors/NOPClosure.html#nopClosure--) - Static method in class org.apache.commons.collections4.functors.[NOPClosure](http://docs.google.com/org/apache/commons/collections4/functors/NOPClosure.html)

Factory returning the singleton instance.

[NOPTransformer](http://docs.google.com/org/apache/commons/collections4/functors/NOPTransformer.html)<[T](http://docs.google.com/org/apache/commons/collections4/functors/NOPTransformer.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Transformer implementation that does nothing.

[nopTransformer()](http://docs.google.com/org/apache/commons/collections4/functors/NOPTransformer.html#nopTransformer--) - Static method in class org.apache.commons.collections4.functors.[NOPTransformer](http://docs.google.com/org/apache/commons/collections4/functors/NOPTransformer.html)

Factory returning the singleton instance.

[nopTransformer()](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html#nopTransformer--) - Static method in class org.apache.commons.collections4.[TransformerUtils](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html)

Gets a transformer that returns the input object.

[notNullBuilder()](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.html#notNullBuilder--) - Static method in class org.apache.commons.collections4.collection.[PredicatedCollection](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.html)

Returns a Builder with a NotNullPredicate.

[NotNullPredicate](http://docs.google.com/org/apache/commons/collections4/functors/NotNullPredicate.html)<[T](http://docs.google.com/org/apache/commons/collections4/functors/NotNullPredicate.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Predicate implementation that returns true if the input is not null.

[notNullPredicate()](http://docs.google.com/org/apache/commons/collections4/functors/NotNullPredicate.html#notNullPredicate--) - Static method in class org.apache.commons.collections4.functors.[NotNullPredicate](http://docs.google.com/org/apache/commons/collections4/functors/NotNullPredicate.html)

Factory returning the singleton instance.

[notNullPredicate()](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html#notNullPredicate--) - Static method in class org.apache.commons.collections4.[PredicateUtils](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html)

Gets a Predicate that checks if the input object passed in is not null.

[NotPredicate](http://docs.google.com/org/apache/commons/collections4/functors/NotPredicate.html)<[T](http://docs.google.com/org/apache/commons/collections4/functors/NotPredicate.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Predicate implementation that returns the opposite of the decorated predicate.

[NotPredicate(Predicate<? super T>)](http://docs.google.com/org/apache/commons/collections4/functors/NotPredicate.html#NotPredicate-org.apache.commons.collections4.Predicate-) - Constructor for class org.apache.commons.collections4.functors.[NotPredicate](http://docs.google.com/org/apache/commons/collections4/functors/NotPredicate.html)

Constructor that performs no validation.

[notPredicate(Predicate<? super T>)](http://docs.google.com/org/apache/commons/collections4/functors/NotPredicate.html#notPredicate-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.functors.[NotPredicate](http://docs.google.com/org/apache/commons/collections4/functors/NotPredicate.html)

Factory to create the not predicate.

[notPredicate(Predicate<? super T>)](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html#notPredicate-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[PredicateUtils](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html)

Create a new Predicate that returns true if the specified predicate returns false and vice versa.

[NULL](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#NULL) - Static variable in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

An object for masking null

[NULL\_BIT\_KEY](http://docs.google.com/org/apache/commons/collections4/trie/KeyAnalyzer.html#NULL_BIT_KEY) - Static variable in class org.apache.commons.collections4.trie.[KeyAnalyzer](http://docs.google.com/org/apache/commons/collections4/trie/KeyAnalyzer.html)

Returned by [KeyAnalyzer.bitIndex(Object, int, int, Object, int, int)](http://docs.google.com/org/apache/commons/collections4/trie/KeyAnalyzer.html#bitIndex-K-int-int-K-int-int-) if key's bits are all 0.

[NULL\_INSTANCE](http://docs.google.com/org/apache/commons/collections4/functors/ConstantFactory.html#NULL_INSTANCE) - Static variable in class org.apache.commons.collections4.functors.[ConstantFactory](http://docs.google.com/org/apache/commons/collections4/functors/ConstantFactory.html)

Returns null each time

[NULL\_INSTANCE](http://docs.google.com/org/apache/commons/collections4/functors/ConstantTransformer.html#NULL_INSTANCE) - Static variable in class org.apache.commons.collections4.functors.[ConstantTransformer](http://docs.google.com/org/apache/commons/collections4/functors/ConstantTransformer.html)

Returns null each time

[NullComparator](http://docs.google.com/org/apache/commons/collections4/comparators/NullComparator.html)<[E](http://docs.google.com/org/apache/commons/collections4/comparators/NullComparator.html)> - Class in [org.apache.commons.collections4.comparators](http://docs.google.com/org/apache/commons/collections4/comparators/package-summary.html)

A Comparator that will compare nulls to be either lower or higher than other objects.

[NullComparator()](http://docs.google.com/org/apache/commons/collections4/comparators/NullComparator.html#NullComparator--) - Constructor for class org.apache.commons.collections4.comparators.[NullComparator](http://docs.google.com/org/apache/commons/collections4/comparators/NullComparator.html)

Construct an instance that sorts null higher than any non-null object it is compared with.

[NullComparator(Comparator<? super E>)](http://docs.google.com/org/apache/commons/collections4/comparators/NullComparator.html#NullComparator-java.util.Comparator-) - Constructor for class org.apache.commons.collections4.comparators.[NullComparator](http://docs.google.com/org/apache/commons/collections4/comparators/NullComparator.html)

Construct an instance that sorts null higher than any non-null object it is compared with.

[NullComparator(boolean)](http://docs.google.com/org/apache/commons/collections4/comparators/NullComparator.html#NullComparator-boolean-) - Constructor for class org.apache.commons.collections4.comparators.[NullComparator](http://docs.google.com/org/apache/commons/collections4/comparators/NullComparator.html)

Construct an instance that sorts null higher or lower than any non-null object it is compared with.

[NullComparator(Comparator<? super E>, boolean)](http://docs.google.com/org/apache/commons/collections4/comparators/NullComparator.html#NullComparator-java.util.Comparator-boolean-) - Constructor for class org.apache.commons.collections4.comparators.[NullComparator](http://docs.google.com/org/apache/commons/collections4/comparators/NullComparator.html)

Construct an instance that sorts null higher or lower than any non-null object it is compared with.

[nullFactory()](http://docs.google.com/org/apache/commons/collections4/FactoryUtils.html#nullFactory--) - Static method in class org.apache.commons.collections4.[FactoryUtils](http://docs.google.com/org/apache/commons/collections4/FactoryUtils.html)

Gets a Factory that will return null each time the factory is used.

[nullHighComparator(Comparator<E>)](http://docs.google.com/org/apache/commons/collections4/ComparatorUtils.html#nullHighComparator-java.util.Comparator-) - Static method in class org.apache.commons.collections4.[ComparatorUtils](http://docs.google.com/org/apache/commons/collections4/ComparatorUtils.html)

Gets a Comparator that controls the comparison of null values.

[NullIsExceptionPredicate](http://docs.google.com/org/apache/commons/collections4/functors/NullIsExceptionPredicate.html)<[T](http://docs.google.com/org/apache/commons/collections4/functors/NullIsExceptionPredicate.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Predicate implementation that throws an exception if the input is null.

[NullIsExceptionPredicate(Predicate<? super T>)](http://docs.google.com/org/apache/commons/collections4/functors/NullIsExceptionPredicate.html#NullIsExceptionPredicate-org.apache.commons.collections4.Predicate-) - Constructor for class org.apache.commons.collections4.functors.[NullIsExceptionPredicate](http://docs.google.com/org/apache/commons/collections4/functors/NullIsExceptionPredicate.html)

Constructor that performs no validation.

[nullIsExceptionPredicate(Predicate<? super T>)](http://docs.google.com/org/apache/commons/collections4/functors/NullIsExceptionPredicate.html#nullIsExceptionPredicate-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.functors.[NullIsExceptionPredicate](http://docs.google.com/org/apache/commons/collections4/functors/NullIsExceptionPredicate.html)

Factory to create the null exception predicate.

[nullIsExceptionPredicate(Predicate<? super T>)](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html#nullIsExceptionPredicate-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[PredicateUtils](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html)

Gets a Predicate that throws an exception if the input object is null, otherwise it calls the specified Predicate.

[NullIsFalsePredicate](http://docs.google.com/org/apache/commons/collections4/functors/NullIsFalsePredicate.html)<[T](http://docs.google.com/org/apache/commons/collections4/functors/NullIsFalsePredicate.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Predicate implementation that returns false if the input is null.

[NullIsFalsePredicate(Predicate<? super T>)](http://docs.google.com/org/apache/commons/collections4/functors/NullIsFalsePredicate.html#NullIsFalsePredicate-org.apache.commons.collections4.Predicate-) - Constructor for class org.apache.commons.collections4.functors.[NullIsFalsePredicate](http://docs.google.com/org/apache/commons/collections4/functors/NullIsFalsePredicate.html)

Constructor that performs no validation.

[nullIsFalsePredicate(Predicate<? super T>)](http://docs.google.com/org/apache/commons/collections4/functors/NullIsFalsePredicate.html#nullIsFalsePredicate-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.functors.[NullIsFalsePredicate](http://docs.google.com/org/apache/commons/collections4/functors/NullIsFalsePredicate.html)

Factory to create the null false predicate.

[nullIsFalsePredicate(Predicate<? super T>)](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html#nullIsFalsePredicate-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[PredicateUtils](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html)

Gets a Predicate that returns false if the input object is null, otherwise it calls the specified Predicate.

[NullIsTruePredicate](http://docs.google.com/org/apache/commons/collections4/functors/NullIsTruePredicate.html)<[T](http://docs.google.com/org/apache/commons/collections4/functors/NullIsTruePredicate.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Predicate implementation that returns true if the input is null.

[NullIsTruePredicate(Predicate<? super T>)](http://docs.google.com/org/apache/commons/collections4/functors/NullIsTruePredicate.html#NullIsTruePredicate-org.apache.commons.collections4.Predicate-) - Constructor for class org.apache.commons.collections4.functors.[NullIsTruePredicate](http://docs.google.com/org/apache/commons/collections4/functors/NullIsTruePredicate.html)

Constructor that performs no validation.

[nullIsTruePredicate(Predicate<? super T>)](http://docs.google.com/org/apache/commons/collections4/functors/NullIsTruePredicate.html#nullIsTruePredicate-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.functors.[NullIsTruePredicate](http://docs.google.com/org/apache/commons/collections4/functors/NullIsTruePredicate.html)

Factory to create the null true predicate.

[nullIsTruePredicate(Predicate<? super T>)](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html#nullIsTruePredicate-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[PredicateUtils](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html)

Gets a Predicate that returns true if the input object is null, otherwise it calls the specified Predicate.

[nullLowComparator(Comparator<E>)](http://docs.google.com/org/apache/commons/collections4/ComparatorUtils.html#nullLowComparator-java.util.Comparator-) - Static method in class org.apache.commons.collections4.[ComparatorUtils](http://docs.google.com/org/apache/commons/collections4/ComparatorUtils.html)

Gets a Comparator that controls the comparison of null values.

[NullPredicate](http://docs.google.com/org/apache/commons/collections4/functors/NullPredicate.html)<[T](http://docs.google.com/org/apache/commons/collections4/functors/NullPredicate.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Predicate implementation that returns true if the input is null.

[nullPredicate()](http://docs.google.com/org/apache/commons/collections4/functors/NullPredicate.html#nullPredicate--) - Static method in class org.apache.commons.collections4.functors.[NullPredicate](http://docs.google.com/org/apache/commons/collections4/functors/NullPredicate.html)

Factory returning the singleton instance.

[nullPredicate()](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html#nullPredicate--) - Static method in class org.apache.commons.collections4.[PredicateUtils](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html)

Gets a Predicate that checks if the input object passed in is null.

[nullTransformer()](http://docs.google.com/org/apache/commons/collections4/functors/ConstantTransformer.html#nullTransformer--) - Static method in class org.apache.commons.collections4.functors.[ConstantTransformer](http://docs.google.com/org/apache/commons/collections4/functors/ConstantTransformer.html)

Get a typed null instance.

[nullTransformer()](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html#nullTransformer--) - Static method in class org.apache.commons.collections4.[TransformerUtils](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html)

Gets a transformer that always returns null.

[nullValue()](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html#nullValue--) - Method in class org.apache.commons.collections4.map.[AbstractReferenceMap.ReferenceEntry](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html)

This method can be overriden to provide custom logic to purge value

## O

[ObjectArrayIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayIterator.html)<[E](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayIterator.html)> - Class in [org.apache.commons.collections4.iterators](http://docs.google.com/org/apache/commons/collections4/iterators/package-summary.html)

An [Iterator](https://docs.oracle.com/javase/7/docs/api/java/util/Iterator.html?is-external=true) over an array of objects.

[ObjectArrayIterator(E...)](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayIterator.html#ObjectArrayIterator-E...-) - Constructor for class org.apache.commons.collections4.iterators.[ObjectArrayIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayIterator.html)

Constructs an ObjectArrayIterator that will iterate over the values in the specified array.

[ObjectArrayIterator(E[], int)](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayIterator.html#ObjectArrayIterator-E:A-int-) - Constructor for class org.apache.commons.collections4.iterators.[ObjectArrayIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayIterator.html)

Constructs an ObjectArrayIterator that will iterate over the values in the specified array from a specific start index.

[ObjectArrayIterator(E[], int, int)](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayIterator.html#ObjectArrayIterator-E:A-int-int-) - Constructor for class org.apache.commons.collections4.iterators.[ObjectArrayIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayIterator.html)

Construct an ObjectArrayIterator that will iterate over a range of values in the specified array.

[ObjectArrayListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayListIterator.html)<[E](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayListIterator.html)> - Class in [org.apache.commons.collections4.iterators](http://docs.google.com/org/apache/commons/collections4/iterators/package-summary.html)

Implements a [ListIterator](https://docs.oracle.com/javase/7/docs/api/java/util/ListIterator.html?is-external=true) over an array of objects.

[ObjectArrayListIterator(E...)](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayListIterator.html#ObjectArrayListIterator-E...-) - Constructor for class org.apache.commons.collections4.iterators.[ObjectArrayListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayListIterator.html)

Constructs an ObjectArrayListIterator that will iterate over the values in the specified array.

[ObjectArrayListIterator(E[], int)](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayListIterator.html#ObjectArrayListIterator-E:A-int-) - Constructor for class org.apache.commons.collections4.iterators.[ObjectArrayListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayListIterator.html)

Constructs an ObjectArrayListIterator that will iterate over the values in the specified array from a specific start index.

[ObjectArrayListIterator(E[], int, int)](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayListIterator.html#ObjectArrayListIterator-E:A-int-int-) - Constructor for class org.apache.commons.collections4.iterators.[ObjectArrayListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayListIterator.html)

Construct an ObjectArrayListIterator that will iterate over a range of values in the specified array.

[ObjectGraphIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectGraphIterator.html)<[E](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectGraphIterator.html)> - Class in [org.apache.commons.collections4.iterators](http://docs.google.com/org/apache/commons/collections4/iterators/package-summary.html)

An Iterator that can traverse multiple iterators down an object graph.

[ObjectGraphIterator(E, Transformer<? super E, ? extends E>)](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectGraphIterator.html#ObjectGraphIterator-E-org.apache.commons.collections4.Transformer-) - Constructor for class org.apache.commons.collections4.iterators.[ObjectGraphIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectGraphIterator.html)

Constructs an ObjectGraphIterator using a root object and transformer.

[ObjectGraphIterator(Iterator<? extends E>)](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectGraphIterator.html#ObjectGraphIterator-java.util.Iterator-) - Constructor for class org.apache.commons.collections4.iterators.[ObjectGraphIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectGraphIterator.html)

Constructs a ObjectGraphIterator that will handle an iterator of iterators.

[objectGraphIterator(E, Transformer<? super E, ? extends E>)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#objectGraphIterator-E-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets an iterator that operates over an object graph.

[of(T)](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html#of-T-) - Static method in class org.apache.commons.collections4.[FluentIterable](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html)

Creates a new FluentIterable of the single provided element.

[of(T...)](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html#of-T...-) - Static method in class org.apache.commons.collections4.[FluentIterable](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html)

Creates a new FluentIterable from the provided elements.

[of(Iterable<T>)](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html#of-java.lang.Iterable-) - Static method in class org.apache.commons.collections4.[FluentIterable](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html)

Construct a new FluentIterable from the provided iterable.

[offer(E)](http://docs.google.com/org/apache/commons/collections4/queue/AbstractQueueDecorator.html#offer-E-) - Method in class org.apache.commons.collections4.queue.[AbstractQueueDecorator](http://docs.google.com/org/apache/commons/collections4/queue/AbstractQueueDecorator.html)   [offer(E)](http://docs.google.com/org/apache/commons/collections4/queue/CircularFifoQueue.html#offer-E-) - Method in class org.apache.commons.collections4.queue.[CircularFifoQueue](http://docs.google.com/org/apache/commons/collections4/queue/CircularFifoQueue.html)

Adds the given element to this queue.

[offer(E)](http://docs.google.com/org/apache/commons/collections4/queue/PredicatedQueue.html#offer-E-) - Method in class org.apache.commons.collections4.queue.[PredicatedQueue](http://docs.google.com/org/apache/commons/collections4/queue/PredicatedQueue.html)

Override to validate the object being added to ensure it matches the predicate.

[offer(E)](http://docs.google.com/org/apache/commons/collections4/queue/SynchronizedQueue.html#offer-E-) - Method in class org.apache.commons.collections4.queue.[SynchronizedQueue](http://docs.google.com/org/apache/commons/collections4/queue/SynchronizedQueue.html)   [offer(E)](http://docs.google.com/org/apache/commons/collections4/queue/TransformedQueue.html#offer-E-) - Method in class org.apache.commons.collections4.queue.[TransformedQueue](http://docs.google.com/org/apache/commons/collections4/queue/TransformedQueue.html)   [offer(E)](http://docs.google.com/org/apache/commons/collections4/queue/UnmodifiableQueue.html#offer-E-) - Method in class org.apache.commons.collections4.queue.[UnmodifiableQueue](http://docs.google.com/org/apache/commons/collections4/queue/UnmodifiableQueue.html)   [OnePredicate](http://docs.google.com/org/apache/commons/collections4/functors/OnePredicate.html)<[T](http://docs.google.com/org/apache/commons/collections4/functors/OnePredicate.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Predicate implementation that returns true if only one of the predicates return true.

[OnePredicate(Predicate<? super T>...)](http://docs.google.com/org/apache/commons/collections4/functors/OnePredicate.html#OnePredicate-org.apache.commons.collections4.Predicate...-) - Constructor for class org.apache.commons.collections4.functors.[OnePredicate](http://docs.google.com/org/apache/commons/collections4/functors/OnePredicate.html)

Constructor that performs no validation.

[onePredicate(Predicate<? super T>...)](http://docs.google.com/org/apache/commons/collections4/functors/OnePredicate.html#onePredicate-org.apache.commons.collections4.Predicate...-) - Static method in class org.apache.commons.collections4.functors.[OnePredicate](http://docs.google.com/org/apache/commons/collections4/functors/OnePredicate.html)

Factory to create the predicate.

[onePredicate(Collection<? extends Predicate<? super T>>)](http://docs.google.com/org/apache/commons/collections4/functors/OnePredicate.html#onePredicate-java.util.Collection-) - Static method in class org.apache.commons.collections4.functors.[OnePredicate](http://docs.google.com/org/apache/commons/collections4/functors/OnePredicate.html)

Factory to create the predicate.

[onePredicate(Predicate<? super T>...)](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html#onePredicate-org.apache.commons.collections4.Predicate...-) - Static method in class org.apache.commons.collections4.[PredicateUtils](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html)

Create a new Predicate that returns true if only one of the specified predicates are true.

[onePredicate(Collection<? extends Predicate<? super T>>)](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html#onePredicate-java.util.Collection-) - Static method in class org.apache.commons.collections4.[PredicateUtils](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html)

Create a new Predicate that returns true if only one of the specified predicates are true.

[onPurge()](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html#onPurge--) - Method in class org.apache.commons.collections4.map.[AbstractReferenceMap.ReferenceEntry](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html)

This is the callback for custom "after purge" logic

[OrderedBidiMap](http://docs.google.com/org/apache/commons/collections4/OrderedBidiMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/OrderedBidiMap.html),[V](http://docs.google.com/org/apache/commons/collections4/OrderedBidiMap.html)> - Interface in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

Defines a map that allows bidirectional lookup between key and values and retains and provides access to an ordering.

[OrderedIterator](http://docs.google.com/org/apache/commons/collections4/OrderedIterator.html)<[E](http://docs.google.com/org/apache/commons/collections4/OrderedIterator.html)> - Interface in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

Defines an iterator that operates over an ordered container.

[orderedMap(Map<K, V>)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#orderedMap-java.util.Map-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Returns a map that maintains the order of keys that are added backed by the given map.

[OrderedMap](http://docs.google.com/org/apache/commons/collections4/OrderedMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/OrderedMap.html),[V](http://docs.google.com/org/apache/commons/collections4/OrderedMap.html)> - Interface in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

Defines a map that maintains order and allows both forward and backward iteration through that order.

[OrderedMapIterator](http://docs.google.com/org/apache/commons/collections4/OrderedMapIterator.html)<[K](http://docs.google.com/org/apache/commons/collections4/OrderedMapIterator.html),[V](http://docs.google.com/org/apache/commons/collections4/OrderedMapIterator.html)> - Interface in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

Defines an iterator that operates over an ordered Map.

[orderedSet(Set<E>)](http://docs.google.com/org/apache/commons/collections4/SetUtils.html#orderedSet-java.util.Set-) - Static method in class org.apache.commons.collections4.[SetUtils](http://docs.google.com/org/apache/commons/collections4/SetUtils.html)

Returns a set that maintains the order of elements that are added backed by the given set.

[org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html) - package org.apache.commons.collections4

This package contains the interfaces and utilities shared across all the subpackages of this component.

[org.apache.commons.collections4.bag](http://docs.google.com/org/apache/commons/collections4/bag/package-summary.html) - package org.apache.commons.collections4.bag

This package contains implementations of the [Bag](http://docs.google.com/org/apache/commons/collections4/Bag.html) and [SortedBag](http://docs.google.com/org/apache/commons/collections4/SortedBag.html) interfaces.

[org.apache.commons.collections4.bidimap](http://docs.google.com/org/apache/commons/collections4/bidimap/package-summary.html) - package org.apache.commons.collections4.bidimap

This package contains implementations of the [BidiMap](http://docs.google.com/org/apache/commons/collections4/BidiMap.html), [OrderedBidiMap](http://docs.google.com/org/apache/commons/collections4/OrderedBidiMap.html) and [SortedBidiMap](http://docs.google.com/org/apache/commons/collections4/SortedBidiMap.html) interfaces.

[org.apache.commons.collections4.collection](http://docs.google.com/org/apache/commons/collections4/collection/package-summary.html) - package org.apache.commons.collections4.collection

This package contains implementations of the [Collection](https://docs.oracle.com/javase/7/docs/api/java/util/Collection.html?is-external=true) interface.

[org.apache.commons.collections4.comparators](http://docs.google.com/org/apache/commons/collections4/comparators/package-summary.html) - package org.apache.commons.collections4.comparators

This package contains implementations of the [Comparator](https://docs.oracle.com/javase/7/docs/api/java/util/Comparator.html?is-external=true) interface.

[org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html) - package org.apache.commons.collections4.functors

This package contains implementations of the [Closure](http://docs.google.com/org/apache/commons/collections4/Closure.html), [Predicate](http://docs.google.com/org/apache/commons/collections4/Predicate.html), [Transformer](http://docs.google.com/org/apache/commons/collections4/Transformer.html) and [Factory](http://docs.google.com/org/apache/commons/collections4/Factory.html) interfaces.

[org.apache.commons.collections4.iterators](http://docs.google.com/org/apache/commons/collections4/iterators/package-summary.html) - package org.apache.commons.collections4.iterators

This package contains implementations of the [Iterator](https://docs.oracle.com/javase/7/docs/api/java/util/Iterator.html?is-external=true) interface.

[org.apache.commons.collections4.keyvalue](http://docs.google.com/org/apache/commons/collections4/keyvalue/package-summary.html) - package org.apache.commons.collections4.keyvalue

This package contains implementations of collection and map related key/value classes.

[org.apache.commons.collections4.list](http://docs.google.com/org/apache/commons/collections4/list/package-summary.html) - package org.apache.commons.collections4.list

This package contains implementations of the [List](https://docs.oracle.com/javase/7/docs/api/java/util/List.html?is-external=true) interface.

[org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html) - package org.apache.commons.collections4.map

This package contains implementations of the [Map](https://docs.oracle.com/javase/7/docs/api/java/util/Map.html?is-external=true), [IterableMap](http://docs.google.com/org/apache/commons/collections4/IterableMap.html), [OrderedMap](http://docs.google.com/org/apache/commons/collections4/OrderedMap.html) and [SortedMap](https://docs.oracle.com/javase/7/docs/api/java/util/SortedMap.html?is-external=true) interfaces.

[org.apache.commons.collections4.multimap](http://docs.google.com/org/apache/commons/collections4/multimap/package-summary.html) - package org.apache.commons.collections4.multimap

This package contains implementations of the [MultiValuedMap](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html) interfaces.

[org.apache.commons.collections4.multiset](http://docs.google.com/org/apache/commons/collections4/multiset/package-summary.html) - package org.apache.commons.collections4.multiset

This package contains implementations of the [MultiSet](http://docs.google.com/org/apache/commons/collections4/MultiSet.html) interface.

[org.apache.commons.collections4.properties](http://docs.google.com/org/apache/commons/collections4/properties/package-summary.html) - package org.apache.commons.collections4.properties

This package contains classes to extend or customize the behavior of [Properties](https://docs.oracle.com/javase/7/docs/api/java/util/Properties.html?is-external=true).

[org.apache.commons.collections4.queue](http://docs.google.com/org/apache/commons/collections4/queue/package-summary.html) - package org.apache.commons.collections4.queue

This package contains implementations for the [Queue](https://docs.oracle.com/javase/7/docs/api/java/util/Queue.html?is-external=true) interface.

[org.apache.commons.collections4.sequence](http://docs.google.com/org/apache/commons/collections4/sequence/package-summary.html) - package org.apache.commons.collections4.sequence

This package provides classes to compare two sequences of objects.

[org.apache.commons.collections4.set](http://docs.google.com/org/apache/commons/collections4/set/package-summary.html) - package org.apache.commons.collections4.set

This package contains implementations of the [Set](https://docs.oracle.com/javase/7/docs/api/java/util/Set.html?is-external=true), [SortedSet](https://docs.oracle.com/javase/7/docs/api/java/util/SortedSet.html?is-external=true) and [NavigableSet](https://docs.oracle.com/javase/7/docs/api/java/util/NavigableSet.html?is-external=true) interfaces.

[org.apache.commons.collections4.splitmap](http://docs.google.com/org/apache/commons/collections4/splitmap/package-summary.html) - package org.apache.commons.collections4.splitmap

The "split map" concept is that of an object that implements the [Put](http://docs.google.com/org/apache/commons/collections4/Put.html) and [Get](http://docs.google.com/org/apache/commons/collections4/Get.html) interfaces, with *differing* generic types.

[org.apache.commons.collections4.trie](http://docs.google.com/org/apache/commons/collections4/trie/package-summary.html) - package org.apache.commons.collections4.trie

This package contains implementations of the [Trie](http://docs.google.com/org/apache/commons/collections4/Trie.html) interface.

[org.apache.commons.collections4.trie.analyzer](http://docs.google.com/org/apache/commons/collections4/trie/analyzer/package-summary.html) - package org.apache.commons.collections4.trie.analyzer

This package contains various [KeyAnalyzer](http://docs.google.com/org/apache/commons/collections4/trie/KeyAnalyzer.html) implementations.

[OrPredicate](http://docs.google.com/org/apache/commons/collections4/functors/OrPredicate.html)<[T](http://docs.google.com/org/apache/commons/collections4/functors/OrPredicate.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Predicate implementation that returns true if either of the predicates return true.

[OrPredicate(Predicate<? super T>, Predicate<? super T>)](http://docs.google.com/org/apache/commons/collections4/functors/OrPredicate.html#OrPredicate-org.apache.commons.collections4.Predicate-org.apache.commons.collections4.Predicate-) - Constructor for class org.apache.commons.collections4.functors.[OrPredicate](http://docs.google.com/org/apache/commons/collections4/functors/OrPredicate.html)

Constructor that performs no validation.

[orPredicate(Predicate<? super T>, Predicate<? super T>)](http://docs.google.com/org/apache/commons/collections4/functors/OrPredicate.html#orPredicate-org.apache.commons.collections4.Predicate-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.functors.[OrPredicate](http://docs.google.com/org/apache/commons/collections4/functors/OrPredicate.html)

Factory to create the predicate.

[orPredicate(Predicate<? super T>, Predicate<? super T>)](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html#orPredicate-org.apache.commons.collections4.Predicate-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[PredicateUtils](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html)

Create a new Predicate that returns true if either of the specified predicates are true.

## [OUT\_OF\_BOUNDS\_BIT\_KEY](http://docs.google.com/org/apache/commons/collections4/trie/KeyAnalyzer.html#OUT_OF_BOUNDS_BIT_KEY) - Static variable in class org.apache.commons.collections4.trie.[KeyAnalyzer](http://docs.google.com/org/apache/commons/collections4/trie/KeyAnalyzer.html)

P

[parent](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.BidiMapIterator.html#parent) - Variable in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.BidiMapIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.BidiMapIterator.html)

The parent map

[parent](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.EntrySetIterator.html#parent) - Variable in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.EntrySetIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.EntrySetIterator.html)

The parent map

[parent](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.KeySetIterator.html#parent) - Variable in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.KeySetIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.KeySetIterator.html)

The parent map

[parent](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.MapEntry.html#parent) - Variable in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.MapEntry](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.MapEntry.html)

The parent map

[parent](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.ValuesIterator.html#parent) - Variable in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.ValuesIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.ValuesIterator.html)

The parent map

[parent](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.View.html#parent) - Variable in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.View](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.View.html)

The parent map

[parent](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedListIterator.html#parent) - Variable in class org.apache.commons.collections4.list.[AbstractLinkedList.LinkedListIterator](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedListIterator.html)

The parent list

[parent](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkIterator.html#parent) - Variable in class org.apache.commons.collections4.map.[AbstractLinkedMap.LinkIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkIterator.html)

The parent map

[parent](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.EntrySetIterator.html#parent) - Variable in class org.apache.commons.collections4.multiset.[AbstractMapMultiSet.EntrySetIterator](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.EntrySetIterator.html)

The parent map

[parent](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.UniqueSetIterator.html#parent) - Variable in class org.apache.commons.collections4.multiset.[AbstractMapMultiSet.UniqueSetIterator](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.UniqueSetIterator.html)

The parent multiset

[parent](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.UniqueSet.html#parent) - Variable in class org.apache.commons.collections4.multiset.[AbstractMultiSet.UniqueSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.UniqueSet.html)

The parent multiset

[parentEntry](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.MultiSetEntry.html#parentEntry) - Variable in class org.apache.commons.collections4.multiset.[AbstractMapMultiSet.MultiSetEntry](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.MultiSetEntry.html)   [partition(Iterable<? extends O>, Predicate<? super O>)](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#partition-java.lang.Iterable-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[IterableUtils](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html)

Partitions all elements from iterable into separate output collections, based on the evaluation of the given predicate.

[partition(Iterable<? extends O>, Predicate<? super O>...)](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#partition-java.lang.Iterable-org.apache.commons.collections4.Predicate...-) - Static method in class org.apache.commons.collections4.[IterableUtils](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html)

Partitions all elements from iterable into separate output collections, based on the evaluation of the given predicates.

[partition(Iterable<? extends O>, Factory<R>, Predicate<? super O>...)](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#partition-java.lang.Iterable-org.apache.commons.collections4.Factory-org.apache.commons.collections4.Predicate...-) - Static method in class org.apache.commons.collections4.[IterableUtils](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html)

Partitions all elements from iterable into separate output collections, based on the evaluation of the given predicates.

[partition(List<T>, int)](http://docs.google.com/org/apache/commons/collections4/ListUtils.html#partition-java.util.List-int-) - Static method in class org.apache.commons.collections4.[ListUtils](http://docs.google.com/org/apache/commons/collections4/ListUtils.html)

Returns consecutive [sublists](https://docs.oracle.com/javase/7/docs/api/java/util/List.html?is-external=true#subList-int-int-) of a list, each of the same size (the final list may be smaller).

[PassiveExpiringMap](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.html),[V](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

Decorates a Map to evict expired entries once their expiration time has been reached.

[PassiveExpiringMap()](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.html#PassiveExpiringMap--) - Constructor for class org.apache.commons.collections4.map.[PassiveExpiringMap](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.html)

Default constructor.

[PassiveExpiringMap(PassiveExpiringMap.ExpirationPolicy<K, V>)](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.html#PassiveExpiringMap-org.apache.commons.collections4.map.PassiveExpiringMap.ExpirationPolicy-) - Constructor for class org.apache.commons.collections4.map.[PassiveExpiringMap](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.html)

Construct a map decorator using the given expiration policy to determine expiration times.

[PassiveExpiringMap(PassiveExpiringMap.ExpirationPolicy<K, V>, Map<K, V>)](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.html#PassiveExpiringMap-org.apache.commons.collections4.map.PassiveExpiringMap.ExpirationPolicy-java.util.Map-) - Constructor for class org.apache.commons.collections4.map.[PassiveExpiringMap](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.html)

Construct a map decorator that decorates the given map and uses the given expiration policy to determine expiration times.

[PassiveExpiringMap(long)](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.html#PassiveExpiringMap-long-) - Constructor for class org.apache.commons.collections4.map.[PassiveExpiringMap](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.html)

Construct a map decorator that decorates the given map using the given time-to-live value measured in milliseconds to create and use a [PassiveExpiringMap.ConstantTimeToLiveExpirationPolicy](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.ConstantTimeToLiveExpirationPolicy.html) expiration policy.

[PassiveExpiringMap(long, Map<K, V>)](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.html#PassiveExpiringMap-long-java.util.Map-) - Constructor for class org.apache.commons.collections4.map.[PassiveExpiringMap](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.html)

Construct a map decorator using the given time-to-live value measured in milliseconds to create and use a [PassiveExpiringMap.ConstantTimeToLiveExpirationPolicy](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.ConstantTimeToLiveExpirationPolicy.html) expiration policy.

[PassiveExpiringMap(long, TimeUnit)](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.html#PassiveExpiringMap-long-java.util.concurrent.TimeUnit-) - Constructor for class org.apache.commons.collections4.map.[PassiveExpiringMap](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.html)

Construct a map decorator using the given time-to-live value measured in the given time units of measure to create and use a [PassiveExpiringMap.ConstantTimeToLiveExpirationPolicy](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.ConstantTimeToLiveExpirationPolicy.html) expiration policy.

[PassiveExpiringMap(long, TimeUnit, Map<K, V>)](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.html#PassiveExpiringMap-long-java.util.concurrent.TimeUnit-java.util.Map-) - Constructor for class org.apache.commons.collections4.map.[PassiveExpiringMap](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.html)

Construct a map decorator that decorates the given map using the given time-to-live value measured in the given time units of measure to create [PassiveExpiringMap.ConstantTimeToLiveExpirationPolicy](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.ConstantTimeToLiveExpirationPolicy.html) expiration policy.

[PassiveExpiringMap(Map<K, V>)](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.html#PassiveExpiringMap-java.util.Map-) - Constructor for class org.apache.commons.collections4.map.[PassiveExpiringMap](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.html)

Constructs a map decorator that decorates the given map and results in entries NEVER expiring.

[PassiveExpiringMap.ConstantTimeToLiveExpirationPolicy](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.ConstantTimeToLiveExpirationPolicy.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.ConstantTimeToLiveExpirationPolicy.html),[V](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.ConstantTimeToLiveExpirationPolicy.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

A [ExpirationPolicy](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.ExpirationPolicy.html) that returns a expiration time that is a constant about of time in the future from the current time.

[PassiveExpiringMap.ExpirationPolicy](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.ExpirationPolicy.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.ExpirationPolicy.html),[V](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.ExpirationPolicy.html)> - Interface in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

A policy to determine the expiration time for key-value entries.

[PatriciaTrie](http://docs.google.com/org/apache/commons/collections4/trie/PatriciaTrie.html)<[E](http://docs.google.com/org/apache/commons/collections4/trie/PatriciaTrie.html)> - Class in [org.apache.commons.collections4.trie](http://docs.google.com/org/apache/commons/collections4/trie/package-summary.html)

Implementation of a PATRICIA Trie (Practical Algorithm to Retrieve Information Coded in Alphanumeric).

[PatriciaTrie()](http://docs.google.com/org/apache/commons/collections4/trie/PatriciaTrie.html#PatriciaTrie--) - Constructor for class org.apache.commons.collections4.trie.[PatriciaTrie](http://docs.google.com/org/apache/commons/collections4/trie/PatriciaTrie.html)   [PatriciaTrie(Map<? extends String, ? extends E>)](http://docs.google.com/org/apache/commons/collections4/trie/PatriciaTrie.html#PatriciaTrie-java.util.Map-) - Constructor for class org.apache.commons.collections4.trie.[PatriciaTrie](http://docs.google.com/org/apache/commons/collections4/trie/PatriciaTrie.html)   [peek()](http://docs.google.com/org/apache/commons/collections4/ArrayStack.html#peek--) - Method in class org.apache.commons.collections4.[ArrayStack](http://docs.google.com/org/apache/commons/collections4/ArrayStack.html)

Deprecated.

Returns the top item off of this stack without removing it.

[peek(int)](http://docs.google.com/org/apache/commons/collections4/ArrayStack.html#peek-int-) - Method in class org.apache.commons.collections4.[ArrayStack](http://docs.google.com/org/apache/commons/collections4/ArrayStack.html)

Deprecated.

Returns the n'th item down (zero-relative) from the top of this stack without removing it.

[peek()](http://docs.google.com/org/apache/commons/collections4/iterators/PeekingIterator.html#peek--) - Method in class org.apache.commons.collections4.iterators.[PeekingIterator](http://docs.google.com/org/apache/commons/collections4/iterators/PeekingIterator.html)

Returns the next element in iteration without advancing the underlying iterator.

[peek()](http://docs.google.com/org/apache/commons/collections4/queue/AbstractQueueDecorator.html#peek--) - Method in class org.apache.commons.collections4.queue.[AbstractQueueDecorator](http://docs.google.com/org/apache/commons/collections4/queue/AbstractQueueDecorator.html)   [peek()](http://docs.google.com/org/apache/commons/collections4/queue/CircularFifoQueue.html#peek--) - Method in class org.apache.commons.collections4.queue.[CircularFifoQueue](http://docs.google.com/org/apache/commons/collections4/queue/CircularFifoQueue.html)   [peek()](http://docs.google.com/org/apache/commons/collections4/queue/PredicatedQueue.html#peek--) - Method in class org.apache.commons.collections4.queue.[PredicatedQueue](http://docs.google.com/org/apache/commons/collections4/queue/PredicatedQueue.html)   [peek()](http://docs.google.com/org/apache/commons/collections4/queue/SynchronizedQueue.html#peek--) - Method in class org.apache.commons.collections4.queue.[SynchronizedQueue](http://docs.google.com/org/apache/commons/collections4/queue/SynchronizedQueue.html)   [peek()](http://docs.google.com/org/apache/commons/collections4/queue/TransformedQueue.html#peek--) - Method in class org.apache.commons.collections4.queue.[TransformedQueue](http://docs.google.com/org/apache/commons/collections4/queue/TransformedQueue.html)   [PeekingIterator](http://docs.google.com/org/apache/commons/collections4/iterators/PeekingIterator.html)<[E](http://docs.google.com/org/apache/commons/collections4/iterators/PeekingIterator.html)> - Class in [org.apache.commons.collections4.iterators](http://docs.google.com/org/apache/commons/collections4/iterators/package-summary.html)

Decorates an iterator to support one-element lookahead while iterating.

[PeekingIterator(Iterator<? extends E>)](http://docs.google.com/org/apache/commons/collections4/iterators/PeekingIterator.html#PeekingIterator-java.util.Iterator-) - Constructor for class org.apache.commons.collections4.iterators.[PeekingIterator](http://docs.google.com/org/apache/commons/collections4/iterators/PeekingIterator.html)

Constructor.

[peekingIterator(Iterator<? extends E>)](http://docs.google.com/org/apache/commons/collections4/iterators/PeekingIterator.html#peekingIterator-java.util.Iterator-) - Static method in class org.apache.commons.collections4.iterators.[PeekingIterator](http://docs.google.com/org/apache/commons/collections4/iterators/PeekingIterator.html)

Decorates the specified iterator to support one-element lookahead.

[peekingIterator(Iterator<? extends E>)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#peekingIterator-java.util.Iterator-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets an iterator that supports one-element lookahead.

[PermutationIterator](http://docs.google.com/org/apache/commons/collections4/iterators/PermutationIterator.html)<[E](http://docs.google.com/org/apache/commons/collections4/iterators/PermutationIterator.html)> - Class in [org.apache.commons.collections4.iterators](http://docs.google.com/org/apache/commons/collections4/iterators/package-summary.html)

This iterator creates permutations of an input collection, using the Steinhaus-Johnson-Trotter algorithm (also called plain changes).

[PermutationIterator(Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/iterators/PermutationIterator.html#PermutationIterator-java.util.Collection-) - Constructor for class org.apache.commons.collections4.iterators.[PermutationIterator](http://docs.google.com/org/apache/commons/collections4/iterators/PermutationIterator.html)

Standard constructor for this class.

[permutations(Collection<E>)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#permutations-java.util.Collection-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Returns a [Collection](https://docs.oracle.com/javase/7/docs/api/java/util/Collection.html?is-external=true) of all the permutations of the input collection.

[poll()](http://docs.google.com/org/apache/commons/collections4/queue/AbstractQueueDecorator.html#poll--) - Method in class org.apache.commons.collections4.queue.[AbstractQueueDecorator](http://docs.google.com/org/apache/commons/collections4/queue/AbstractQueueDecorator.html)   [poll()](http://docs.google.com/org/apache/commons/collections4/queue/CircularFifoQueue.html#poll--) - Method in class org.apache.commons.collections4.queue.[CircularFifoQueue](http://docs.google.com/org/apache/commons/collections4/queue/CircularFifoQueue.html)   [poll()](http://docs.google.com/org/apache/commons/collections4/queue/PredicatedQueue.html#poll--) - Method in class org.apache.commons.collections4.queue.[PredicatedQueue](http://docs.google.com/org/apache/commons/collections4/queue/PredicatedQueue.html)   [poll()](http://docs.google.com/org/apache/commons/collections4/queue/SynchronizedQueue.html#poll--) - Method in class org.apache.commons.collections4.queue.[SynchronizedQueue](http://docs.google.com/org/apache/commons/collections4/queue/SynchronizedQueue.html)   [poll()](http://docs.google.com/org/apache/commons/collections4/queue/TransformedQueue.html#poll--) - Method in class org.apache.commons.collections4.queue.[TransformedQueue](http://docs.google.com/org/apache/commons/collections4/queue/TransformedQueue.html)   [poll()](http://docs.google.com/org/apache/commons/collections4/queue/UnmodifiableQueue.html#poll--) - Method in class org.apache.commons.collections4.queue.[UnmodifiableQueue](http://docs.google.com/org/apache/commons/collections4/queue/UnmodifiableQueue.html)   [pollFirst()](http://docs.google.com/org/apache/commons/collections4/set/AbstractNavigableSetDecorator.html#pollFirst--) - Method in class org.apache.commons.collections4.set.[AbstractNavigableSetDecorator](http://docs.google.com/org/apache/commons/collections4/set/AbstractNavigableSetDecorator.html)   [pollFirst()](http://docs.google.com/org/apache/commons/collections4/set/PredicatedNavigableSet.html#pollFirst--) - Method in class org.apache.commons.collections4.set.[PredicatedNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/PredicatedNavigableSet.html)   [pollFirst()](http://docs.google.com/org/apache/commons/collections4/set/TransformedNavigableSet.html#pollFirst--) - Method in class org.apache.commons.collections4.set.[TransformedNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/TransformedNavigableSet.html)   [pollLast()](http://docs.google.com/org/apache/commons/collections4/set/AbstractNavigableSetDecorator.html#pollLast--) - Method in class org.apache.commons.collections4.set.[AbstractNavigableSetDecorator](http://docs.google.com/org/apache/commons/collections4/set/AbstractNavigableSetDecorator.html)   [pollLast()](http://docs.google.com/org/apache/commons/collections4/set/PredicatedNavigableSet.html#pollLast--) - Method in class org.apache.commons.collections4.set.[PredicatedNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/PredicatedNavigableSet.html)   [pollLast()](http://docs.google.com/org/apache/commons/collections4/set/TransformedNavigableSet.html#pollLast--) - Method in class org.apache.commons.collections4.set.[TransformedNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/TransformedNavigableSet.html)   [pop()](http://docs.google.com/org/apache/commons/collections4/ArrayStack.html#pop--) - Method in class org.apache.commons.collections4.[ArrayStack](http://docs.google.com/org/apache/commons/collections4/ArrayStack.html)

Deprecated.

Pops the top item off of this stack and return it.

[populateMap(Map<K, V>, Iterable<? extends V>, Transformer<V, K>)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#populateMap-java.util.Map-java.lang.Iterable-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Populates a Map using the supplied Transformer to transform the elements into keys, using the unaltered element as the value in the Map.

[populateMap(Map<K, V>, Iterable<? extends E>, Transformer<E, K>, Transformer<E, V>)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#populateMap-java.util.Map-java.lang.Iterable-org.apache.commons.collections4.Transformer-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Populates a Map using the supplied Transformers to transform the elements into keys and values.

[populateMap(MultiMap<K, V>, Iterable<? extends V>, Transformer<V, K>)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#populateMap-org.apache.commons.collections4.MultiMap-java.lang.Iterable-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Populates a MultiMap using the supplied Transformer to transform the elements into keys, using the unaltered element as the value in the MultiMap.

[populateMap(MultiMap<K, V>, Iterable<? extends E>, Transformer<E, K>, Transformer<E, V>)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#populateMap-org.apache.commons.collections4.MultiMap-java.lang.Iterable-org.apache.commons.collections4.Transformer-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Populates a MultiMap using the supplied Transformers to transform the elements into keys and values.

[predicate](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.html#predicate) - Variable in class org.apache.commons.collections4.collection.[PredicatedCollection](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.html)

The predicate to use

[Predicate](http://docs.google.com/org/apache/commons/collections4/Predicate.html)<[T](http://docs.google.com/org/apache/commons/collections4/Predicate.html)> - Interface in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

Defines a functor interface implemented by classes that perform a predicate test on an object.

[PredicatedBag](http://docs.google.com/org/apache/commons/collections4/bag/PredicatedBag.html)<[E](http://docs.google.com/org/apache/commons/collections4/bag/PredicatedBag.html)> - Class in [org.apache.commons.collections4.bag](http://docs.google.com/org/apache/commons/collections4/bag/package-summary.html)

Decorates another [Bag](http://docs.google.com/org/apache/commons/collections4/Bag.html) to validate that additions match a specified predicate.

[PredicatedBag(Bag<E>, Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/bag/PredicatedBag.html#PredicatedBag-org.apache.commons.collections4.Bag-org.apache.commons.collections4.Predicate-) - Constructor for class org.apache.commons.collections4.bag.[PredicatedBag](http://docs.google.com/org/apache/commons/collections4/bag/PredicatedBag.html)

Constructor that wraps (not copies).

[predicatedBag(Bag<E>, Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/bag/PredicatedBag.html#predicatedBag-org.apache.commons.collections4.Bag-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.bag.[PredicatedBag](http://docs.google.com/org/apache/commons/collections4/bag/PredicatedBag.html)

Factory method to create a predicated (validating) bag.

[predicatedBag(Bag<E>, Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/BagUtils.html#predicatedBag-org.apache.commons.collections4.Bag-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[BagUtils](http://docs.google.com/org/apache/commons/collections4/BagUtils.html)

Returns a predicated (validating) bag backed by the given bag.

[PredicatedCollection](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.html)<[E](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.html)> - Class in [org.apache.commons.collections4.collection](http://docs.google.com/org/apache/commons/collections4/collection/package-summary.html)

Decorates another [Collection](https://docs.oracle.com/javase/7/docs/api/java/util/Collection.html?is-external=true) to validate that additions match a specified predicate.

[PredicatedCollection(Collection<E>, Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.html#PredicatedCollection-java.util.Collection-org.apache.commons.collections4.Predicate-) - Constructor for class org.apache.commons.collections4.collection.[PredicatedCollection](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.html)

Constructor that wraps (not copies).

[predicatedCollection(Collection<T>, Predicate<? super T>)](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.html#predicatedCollection-java.util.Collection-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.collection.[PredicatedCollection](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.html)

Factory method to create a predicated (validating) collection.

[predicatedCollection(Collection<C>, Predicate<? super C>)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#predicatedCollection-java.util.Collection-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Returns a predicated (validating) collection backed by the given collection.

[PredicatedCollection.Builder](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.Builder.html)<[E](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.Builder.html)> - Class in [org.apache.commons.collections4.collection](http://docs.google.com/org/apache/commons/collections4/collection/package-summary.html)

Builder for creating predicated collections.

[PredicateDecorator](http://docs.google.com/org/apache/commons/collections4/functors/PredicateDecorator.html)<[T](http://docs.google.com/org/apache/commons/collections4/functors/PredicateDecorator.html)> - Interface in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Defines a predicate that decorates one or more other predicates.

[PredicatedList](http://docs.google.com/org/apache/commons/collections4/list/PredicatedList.html)<[E](http://docs.google.com/org/apache/commons/collections4/list/PredicatedList.html)> - Class in [org.apache.commons.collections4.list](http://docs.google.com/org/apache/commons/collections4/list/package-summary.html)

Decorates another List to validate that all additions match a specified predicate.

[PredicatedList(List<E>, Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/list/PredicatedList.html#PredicatedList-java.util.List-org.apache.commons.collections4.Predicate-) - Constructor for class org.apache.commons.collections4.list.[PredicatedList](http://docs.google.com/org/apache/commons/collections4/list/PredicatedList.html)

Constructor that wraps (not copies).

[predicatedList(List<T>, Predicate<? super T>)](http://docs.google.com/org/apache/commons/collections4/list/PredicatedList.html#predicatedList-java.util.List-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.list.[PredicatedList](http://docs.google.com/org/apache/commons/collections4/list/PredicatedList.html)

Factory method to create a predicated (validating) list.

[predicatedList(List<E>, Predicate<E>)](http://docs.google.com/org/apache/commons/collections4/ListUtils.html#predicatedList-java.util.List-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[ListUtils](http://docs.google.com/org/apache/commons/collections4/ListUtils.html)

Returns a predicated (validating) list backed by the given list.

[PredicatedList.PredicatedListIterator](http://docs.google.com/org/apache/commons/collections4/list/PredicatedList.PredicatedListIterator.html) - Class in [org.apache.commons.collections4.list](http://docs.google.com/org/apache/commons/collections4/list/package-summary.html)

Inner class Iterator for the PredicatedList

[PredicatedListIterator(ListIterator<E>)](http://docs.google.com/org/apache/commons/collections4/list/PredicatedList.PredicatedListIterator.html#PredicatedListIterator-java.util.ListIterator-) - Constructor for class org.apache.commons.collections4.list.[PredicatedList.PredicatedListIterator](http://docs.google.com/org/apache/commons/collections4/list/PredicatedList.PredicatedListIterator.html)

Create a new predicated list iterator.

[PredicatedMap](http://docs.google.com/org/apache/commons/collections4/map/PredicatedMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/PredicatedMap.html),[V](http://docs.google.com/org/apache/commons/collections4/map/PredicatedMap.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

Decorates another Map to validate that additions match a specified predicate.

[PredicatedMap(Map<K, V>, Predicate<? super K>, Predicate<? super V>)](http://docs.google.com/org/apache/commons/collections4/map/PredicatedMap.html#PredicatedMap-java.util.Map-org.apache.commons.collections4.Predicate-org.apache.commons.collections4.Predicate-) - Constructor for class org.apache.commons.collections4.map.[PredicatedMap](http://docs.google.com/org/apache/commons/collections4/map/PredicatedMap.html)

Constructor that wraps (not copies).

[predicatedMap(Map<K, V>, Predicate<? super K>, Predicate<? super V>)](http://docs.google.com/org/apache/commons/collections4/map/PredicatedMap.html#predicatedMap-java.util.Map-org.apache.commons.collections4.Predicate-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.map.[PredicatedMap](http://docs.google.com/org/apache/commons/collections4/map/PredicatedMap.html)

Factory method to create a predicated (validating) map.

[predicatedMap(Map<K, V>, Predicate<? super K>, Predicate<? super V>)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#predicatedMap-java.util.Map-org.apache.commons.collections4.Predicate-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Returns a predicated (validating) map backed by the given map.

[PredicatedMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/PredicatedMultiSet.html)<[E](http://docs.google.com/org/apache/commons/collections4/multiset/PredicatedMultiSet.html)> - Class in [org.apache.commons.collections4.multiset](http://docs.google.com/org/apache/commons/collections4/multiset/package-summary.html)

Decorates another [MultiSet](http://docs.google.com/org/apache/commons/collections4/MultiSet.html) to validate that additions match a specified predicate.

[PredicatedMultiSet(MultiSet<E>, Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/multiset/PredicatedMultiSet.html#PredicatedMultiSet-org.apache.commons.collections4.MultiSet-org.apache.commons.collections4.Predicate-) - Constructor for class org.apache.commons.collections4.multiset.[PredicatedMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/PredicatedMultiSet.html)

Constructor that wraps (not copies).

[predicatedMultiSet(MultiSet<E>, Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/multiset/PredicatedMultiSet.html#predicatedMultiSet-org.apache.commons.collections4.MultiSet-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.multiset.[PredicatedMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/PredicatedMultiSet.html)

Factory method to create a predicated (validating) multiset.

[predicatedMultiSet(MultiSet<E>, Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/MultiSetUtils.html#predicatedMultiSet-org.apache.commons.collections4.MultiSet-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[MultiSetUtils](http://docs.google.com/org/apache/commons/collections4/MultiSetUtils.html)

Returns a predicated (validating) multiset backed by the given multiset.

[PredicatedNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/PredicatedNavigableSet.html)<[E](http://docs.google.com/org/apache/commons/collections4/set/PredicatedNavigableSet.html)> - Class in [org.apache.commons.collections4.set](http://docs.google.com/org/apache/commons/collections4/set/package-summary.html)

Decorates another NavigableSet to validate that all additions match a specified predicate.

[PredicatedNavigableSet(NavigableSet<E>, Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/set/PredicatedNavigableSet.html#PredicatedNavigableSet-java.util.NavigableSet-org.apache.commons.collections4.Predicate-) - Constructor for class org.apache.commons.collections4.set.[PredicatedNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/PredicatedNavigableSet.html)

Constructor that wraps (not copies).

[predicatedNavigableSet(NavigableSet<E>, Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/set/PredicatedNavigableSet.html#predicatedNavigableSet-java.util.NavigableSet-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.set.[PredicatedNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/PredicatedNavigableSet.html)

Factory method to create a predicated (validating) navigable set.

[predicatedNavigableSet(NavigableSet<E>, Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/SetUtils.html#predicatedNavigableSet-java.util.NavigableSet-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[SetUtils](http://docs.google.com/org/apache/commons/collections4/SetUtils.html)

Returns a predicated (validating) navigable set backed by the given navigable set.

[PredicatedQueue](http://docs.google.com/org/apache/commons/collections4/queue/PredicatedQueue.html)<[E](http://docs.google.com/org/apache/commons/collections4/queue/PredicatedQueue.html)> - Class in [org.apache.commons.collections4.queue](http://docs.google.com/org/apache/commons/collections4/queue/package-summary.html)

Decorates another [Queue](https://docs.oracle.com/javase/7/docs/api/java/util/Queue.html?is-external=true) to validate that additions match a specified predicate.

[PredicatedQueue(Queue<E>, Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/queue/PredicatedQueue.html#PredicatedQueue-java.util.Queue-org.apache.commons.collections4.Predicate-) - Constructor for class org.apache.commons.collections4.queue.[PredicatedQueue](http://docs.google.com/org/apache/commons/collections4/queue/PredicatedQueue.html)

Constructor that wraps (not copies).

[predicatedQueue(Queue<E>, Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/queue/PredicatedQueue.html#predicatedQueue-java.util.Queue-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.queue.[PredicatedQueue](http://docs.google.com/org/apache/commons/collections4/queue/PredicatedQueue.html)

Factory method to create a predicated (validating) queue.

[predicatedQueue(Queue<E>, Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/QueueUtils.html#predicatedQueue-java.util.Queue-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[QueueUtils](http://docs.google.com/org/apache/commons/collections4/QueueUtils.html)

Returns a predicated (validating) queue backed by the given queue.

[PredicatedSet](http://docs.google.com/org/apache/commons/collections4/set/PredicatedSet.html)<[E](http://docs.google.com/org/apache/commons/collections4/set/PredicatedSet.html)> - Class in [org.apache.commons.collections4.set](http://docs.google.com/org/apache/commons/collections4/set/package-summary.html)

Decorates another Set to validate that all additions match a specified predicate.

[PredicatedSet(Set<E>, Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/set/PredicatedSet.html#PredicatedSet-java.util.Set-org.apache.commons.collections4.Predicate-) - Constructor for class org.apache.commons.collections4.set.[PredicatedSet](http://docs.google.com/org/apache/commons/collections4/set/PredicatedSet.html)

Constructor that wraps (not copies).

[predicatedSet(Set<E>, Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/set/PredicatedSet.html#predicatedSet-java.util.Set-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.set.[PredicatedSet](http://docs.google.com/org/apache/commons/collections4/set/PredicatedSet.html)

Factory method to create a predicated (validating) set.

[predicatedSet(Set<E>, Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/SetUtils.html#predicatedSet-java.util.Set-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[SetUtils](http://docs.google.com/org/apache/commons/collections4/SetUtils.html)

Returns a predicated (validating) set backed by the given set.

[PredicatedSortedBag](http://docs.google.com/org/apache/commons/collections4/bag/PredicatedSortedBag.html)<[E](http://docs.google.com/org/apache/commons/collections4/bag/PredicatedSortedBag.html)> - Class in [org.apache.commons.collections4.bag](http://docs.google.com/org/apache/commons/collections4/bag/package-summary.html)

Decorates another [SortedBag](http://docs.google.com/org/apache/commons/collections4/SortedBag.html) to validate that additions match a specified predicate.

[PredicatedSortedBag(SortedBag<E>, Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/bag/PredicatedSortedBag.html#PredicatedSortedBag-org.apache.commons.collections4.SortedBag-org.apache.commons.collections4.Predicate-) - Constructor for class org.apache.commons.collections4.bag.[PredicatedSortedBag](http://docs.google.com/org/apache/commons/collections4/bag/PredicatedSortedBag.html)

Constructor that wraps (not copies).

[predicatedSortedBag(SortedBag<E>, Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/bag/PredicatedSortedBag.html#predicatedSortedBag-org.apache.commons.collections4.SortedBag-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.bag.[PredicatedSortedBag](http://docs.google.com/org/apache/commons/collections4/bag/PredicatedSortedBag.html)

Factory method to create a predicated (validating) bag.

[predicatedSortedBag(SortedBag<E>, Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/BagUtils.html#predicatedSortedBag-org.apache.commons.collections4.SortedBag-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[BagUtils](http://docs.google.com/org/apache/commons/collections4/BagUtils.html)

Returns a predicated (validating) sorted bag backed by the given sorted bag.

[PredicatedSortedMap](http://docs.google.com/org/apache/commons/collections4/map/PredicatedSortedMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/PredicatedSortedMap.html),[V](http://docs.google.com/org/apache/commons/collections4/map/PredicatedSortedMap.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

Decorates another SortedMap to validate that additions match a specified predicate.

[PredicatedSortedMap(SortedMap<K, V>, Predicate<? super K>, Predicate<? super V>)](http://docs.google.com/org/apache/commons/collections4/map/PredicatedSortedMap.html#PredicatedSortedMap-java.util.SortedMap-org.apache.commons.collections4.Predicate-org.apache.commons.collections4.Predicate-) - Constructor for class org.apache.commons.collections4.map.[PredicatedSortedMap](http://docs.google.com/org/apache/commons/collections4/map/PredicatedSortedMap.html)

Constructor that wraps (not copies).

[predicatedSortedMap(SortedMap<K, V>, Predicate<? super K>, Predicate<? super V>)](http://docs.google.com/org/apache/commons/collections4/map/PredicatedSortedMap.html#predicatedSortedMap-java.util.SortedMap-org.apache.commons.collections4.Predicate-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.map.[PredicatedSortedMap](http://docs.google.com/org/apache/commons/collections4/map/PredicatedSortedMap.html)

Factory method to create a predicated (validating) sorted map.

[predicatedSortedMap(SortedMap<K, V>, Predicate<? super K>, Predicate<? super V>)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#predicatedSortedMap-java.util.SortedMap-org.apache.commons.collections4.Predicate-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Returns a predicated (validating) sorted map backed by the given map.

[PredicatedSortedSet](http://docs.google.com/org/apache/commons/collections4/set/PredicatedSortedSet.html)<[E](http://docs.google.com/org/apache/commons/collections4/set/PredicatedSortedSet.html)> - Class in [org.apache.commons.collections4.set](http://docs.google.com/org/apache/commons/collections4/set/package-summary.html)

Decorates another SortedSet to validate that all additions match a specified predicate.

[PredicatedSortedSet(SortedSet<E>, Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/set/PredicatedSortedSet.html#PredicatedSortedSet-java.util.SortedSet-org.apache.commons.collections4.Predicate-) - Constructor for class org.apache.commons.collections4.set.[PredicatedSortedSet](http://docs.google.com/org/apache/commons/collections4/set/PredicatedSortedSet.html)

Constructor that wraps (not copies).

[predicatedSortedSet(SortedSet<E>, Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/set/PredicatedSortedSet.html#predicatedSortedSet-java.util.SortedSet-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.set.[PredicatedSortedSet](http://docs.google.com/org/apache/commons/collections4/set/PredicatedSortedSet.html)

Factory method to create a predicated (validating) sorted set.

[predicatedSortedSet(SortedSet<E>, Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/SetUtils.html#predicatedSortedSet-java.util.SortedSet-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[SetUtils](http://docs.google.com/org/apache/commons/collections4/SetUtils.html)

Returns a predicated (validating) sorted set backed by the given sorted set.

[PredicateTransformer](http://docs.google.com/org/apache/commons/collections4/functors/PredicateTransformer.html)<[T](http://docs.google.com/org/apache/commons/collections4/functors/PredicateTransformer.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Transformer implementation that calls a Predicate using the input object and then returns the result.

[PredicateTransformer(Predicate<? super T>)](http://docs.google.com/org/apache/commons/collections4/functors/PredicateTransformer.html#PredicateTransformer-org.apache.commons.collections4.Predicate-) - Constructor for class org.apache.commons.collections4.functors.[PredicateTransformer](http://docs.google.com/org/apache/commons/collections4/functors/PredicateTransformer.html)

Constructor that performs no validation.

[predicateTransformer(Predicate<? super T>)](http://docs.google.com/org/apache/commons/collections4/functors/PredicateTransformer.html#predicateTransformer-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.functors.[PredicateTransformer](http://docs.google.com/org/apache/commons/collections4/functors/PredicateTransformer.html)

Factory method that performs validation.

[PredicateUtils](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html) - Class in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

PredicateUtils provides reference implementations and utilities for the Predicate functor interface.

[prefixMap(K)](http://docs.google.com/org/apache/commons/collections4/Trie.html#prefixMap-K-) - Method in interface org.apache.commons.collections4.[Trie](http://docs.google.com/org/apache/commons/collections4/Trie.html)

Returns a view of this [Trie](http://docs.google.com/org/apache/commons/collections4/Trie.html) of all elements that are prefixed by the given key.

[prefixMap(K)](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html#prefixMap-K-) - Method in class org.apache.commons.collections4.trie.[UnmodifiableTrie](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html)   [previous()](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.BidiOrderedMapIterator.html#previous--) - Method in class org.apache.commons.collections4.bidimap.[DualTreeBidiMap.BidiOrderedMapIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.BidiOrderedMapIterator.html)   [previous()](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractListIteratorDecorator.html#previous--) - Method in class org.apache.commons.collections4.iterators.[AbstractListIteratorDecorator](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractListIteratorDecorator.html) [previous()](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractOrderedMapIteratorDecorator.html#previous--) - Method in class org.apache.commons.collections4.iterators.[AbstractOrderedMapIteratorDecorator](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractOrderedMapIteratorDecorator.html)

Gets the previous *key* from the Map.

[previous()](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayListIterator.html#previous--) - Method in class org.apache.commons.collections4.iterators.[ArrayListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayListIterator.html)

Gets the previous element from the array.

[previous()](http://docs.google.com/org/apache/commons/collections4/iterators/FilterListIterator.html#previous--) - Method in class org.apache.commons.collections4.iterators.[FilterListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/FilterListIterator.html)   [previous()](http://docs.google.com/org/apache/commons/collections4/iterators/ListIteratorWrapper.html#previous--) - Method in class org.apache.commons.collections4.iterators.[ListIteratorWrapper](http://docs.google.com/org/apache/commons/collections4/iterators/ListIteratorWrapper.html)

Returns the previous element.

[previous()](http://docs.google.com/org/apache/commons/collections4/iterators/LoopingListIterator.html#previous--) - Method in class org.apache.commons.collections4.iterators.[LoopingListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/LoopingListIterator.html)

Returns the previous object in the list.

[previous()](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayListIterator.html#previous--) - Method in class org.apache.commons.collections4.iterators.[ObjectArrayListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayListIterator.html)

Gets the previous element from the array.

[previous()](http://docs.google.com/org/apache/commons/collections4/iterators/ReverseListIterator.html#previous--) - Method in class org.apache.commons.collections4.iterators.[ReverseListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ReverseListIterator.html)

Gets the previous element.

[previous()](http://docs.google.com/org/apache/commons/collections4/iterators/SingletonListIterator.html#previous--) - Method in class org.apache.commons.collections4.iterators.[SingletonListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/SingletonListIterator.html)

Get the previous object from the iterator.

[previous()](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableListIterator.html#previous--) - Method in class org.apache.commons.collections4.iterators.[UnmodifiableListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableListIterator.html)   [previous()](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableOrderedMapIterator.html#previous--) - Method in class org.apache.commons.collections4.iterators.[UnmodifiableOrderedMapIterator](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableOrderedMapIterator.html)   [previous()](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedListIterator.html#previous--) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList.LinkedListIterator](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedListIterator.html)   [previous](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.Node.html#previous) - Variable in class org.apache.commons.collections4.list.[AbstractLinkedList.Node](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.Node.html)

A pointer to the node before this node

[previous()](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.EntrySetIterator.html#previous--) - Method in class org.apache.commons.collections4.map.[AbstractLinkedMap.EntrySetIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.EntrySetIterator.html)   [previous()](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.KeySetIterator.html#previous--) - Method in class org.apache.commons.collections4.map.[AbstractLinkedMap.KeySetIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.KeySetIterator.html)   [previous()](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkMapIterator.html#previous--) - Method in class org.apache.commons.collections4.map.[AbstractLinkedMap.LinkMapIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkMapIterator.html)   [previous()](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.ValuesIterator.html#previous--) - Method in class org.apache.commons.collections4.map.[AbstractLinkedMap.ValuesIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.ValuesIterator.html)   [previous()](http://docs.google.com/org/apache/commons/collections4/map/AbstractSortedMapDecorator.SortedMapIterator.html#previous--) - Method in class org.apache.commons.collections4.map.[AbstractSortedMapDecorator.SortedMapIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractSortedMapDecorator.SortedMapIterator.html)

Gets the previous *key* from the Map.

[previous()](http://docs.google.com/org/apache/commons/collections4/OrderedIterator.html#previous--) - Method in interface org.apache.commons.collections4.[OrderedIterator](http://docs.google.com/org/apache/commons/collections4/OrderedIterator.html)

Gets the previous element from the container.

[previous()](http://docs.google.com/org/apache/commons/collections4/OrderedMapIterator.html#previous--) - Method in interface org.apache.commons.collections4.[OrderedMapIterator](http://docs.google.com/org/apache/commons/collections4/OrderedMapIterator.html)

Gets the previous *key* from the Map.

[previousEntry()](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkIterator.html#previousEntry--) - Method in class org.apache.commons.collections4.map.[AbstractLinkedMap.LinkIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkIterator.html)   [previousIndex()](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractListIteratorDecorator.html#previousIndex--) - Method in class org.apache.commons.collections4.iterators.[AbstractListIteratorDecorator](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractListIteratorDecorator.html) [previousIndex()](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayListIterator.html#previousIndex--) - Method in class org.apache.commons.collections4.iterators.[ArrayListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayListIterator.html)

Gets the index of the item to be retrieved if [ArrayListIterator.previous()](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayListIterator.html#previous--) is called.

[previousIndex()](http://docs.google.com/org/apache/commons/collections4/iterators/FilterListIterator.html#previousIndex--) - Method in class org.apache.commons.collections4.iterators.[FilterListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/FilterListIterator.html)   [previousIndex()](http://docs.google.com/org/apache/commons/collections4/iterators/ListIteratorWrapper.html#previousIndex--) - Method in class org.apache.commons.collections4.iterators.[ListIteratorWrapper](http://docs.google.com/org/apache/commons/collections4/iterators/ListIteratorWrapper.html)

Returns the index of the previous element.

[previousIndex()](http://docs.google.com/org/apache/commons/collections4/iterators/LoopingListIterator.html#previousIndex--) - Method in class org.apache.commons.collections4.iterators.[LoopingListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/LoopingListIterator.html)

Returns the index of the element that would be returned by a subsequent call to [LoopingListIterator.previous()](http://docs.google.com/org/apache/commons/collections4/iterators/LoopingListIterator.html#previous--).

[previousIndex()](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayListIterator.html#previousIndex--) - Method in class org.apache.commons.collections4.iterators.[ObjectArrayListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayListIterator.html)

Gets the index of the item to be retrieved if [ObjectArrayListIterator.previous()](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayListIterator.html#previous--) is called.

[previousIndex()](http://docs.google.com/org/apache/commons/collections4/iterators/ReverseListIterator.html#previousIndex--) - Method in class org.apache.commons.collections4.iterators.[ReverseListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ReverseListIterator.html)

Gets the index of the previous element.

[previousIndex()](http://docs.google.com/org/apache/commons/collections4/iterators/SingletonListIterator.html#previousIndex--) - Method in class org.apache.commons.collections4.iterators.[SingletonListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/SingletonListIterator.html)

Returns the index of the element that would be returned by a subsequent call to previous.

[previousIndex()](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableListIterator.html#previousIndex--) - Method in class org.apache.commons.collections4.iterators.[UnmodifiableListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableListIterator.html)   [previousIndex()](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedListIterator.html#previousIndex--) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList.LinkedListIterator](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedListIterator.html)   [previousKey(K)](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractOrderedBidiMapDecorator.html#previousKey-K-) - Method in class org.apache.commons.collections4.bidimap.[AbstractOrderedBidiMapDecorator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractOrderedBidiMapDecorator.html)   [previousKey(K)](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.html#previousKey-K-) - Method in class org.apache.commons.collections4.bidimap.[DualTreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.html)   [previousKey(K)](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.ViewMap.html#previousKey-K-) - Method in class org.apache.commons.collections4.bidimap.[DualTreeBidiMap.ViewMap](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.ViewMap.html)   [previousKey(K)](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html#previousKey-K-) - Method in class org.apache.commons.collections4.bidimap.[TreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html)

Gets the previous key before the one specified.

[previousKey(Object)](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html#previousKey-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[AbstractLinkedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html)

Gets the previous key in sequence.

[previousKey(K)](http://docs.google.com/org/apache/commons/collections4/map/AbstractOrderedMapDecorator.html#previousKey-K-) - Method in class org.apache.commons.collections4.map.[AbstractOrderedMapDecorator](http://docs.google.com/org/apache/commons/collections4/map/AbstractOrderedMapDecorator.html)   [previousKey(K)](http://docs.google.com/org/apache/commons/collections4/map/AbstractSortedMapDecorator.html#previousKey-K-) - Method in class org.apache.commons.collections4.map.[AbstractSortedMapDecorator](http://docs.google.com/org/apache/commons/collections4/map/AbstractSortedMapDecorator.html)   [previousKey(Object)](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html#previousKey-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[ListOrderedMap](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html)

Gets the previous key to the one specified using insert order.

[previousKey(K)](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html#previousKey-K-) - Method in class org.apache.commons.collections4.map.[SingletonMap](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html)

Gets the previous key before the key specified, always null.

[previousKey(K)](http://docs.google.com/org/apache/commons/collections4/OrderedMap.html#previousKey-K-) - Method in interface org.apache.commons.collections4.[OrderedMap](http://docs.google.com/org/apache/commons/collections4/OrderedMap.html)

Gets the previous key before the one specified.

[previousKey(K)](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html#previousKey-K-) - Method in class org.apache.commons.collections4.trie.[UnmodifiableTrie](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html)   [PropertiesFactory](http://docs.google.com/org/apache/commons/collections4/properties/PropertiesFactory.html) - Class in [org.apache.commons.collections4.properties](http://docs.google.com/org/apache/commons/collections4/properties/package-summary.html)

Creates and loads [Properties](https://docs.oracle.com/javase/7/docs/api/java/util/Properties.html?is-external=true).

[prototypeFactory(T)](http://docs.google.com/org/apache/commons/collections4/FactoryUtils.html#prototypeFactory-T-) - Static method in class org.apache.commons.collections4.[FactoryUtils](http://docs.google.com/org/apache/commons/collections4/FactoryUtils.html)

Creates a Factory that will return a clone of the same prototype object each time the factory is used.

[PrototypeFactory](http://docs.google.com/org/apache/commons/collections4/functors/PrototypeFactory.html) - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Factory implementation that creates a new instance each time based on a prototype.

[prototypeFactory(T)](http://docs.google.com/org/apache/commons/collections4/functors/PrototypeFactory.html#prototypeFactory-T-) - Static method in class org.apache.commons.collections4.functors.[PrototypeFactory](http://docs.google.com/org/apache/commons/collections4/functors/PrototypeFactory.html)

Factory method that performs validation.

[purge()](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html#purge--) - Method in class org.apache.commons.collections4.map.[AbstractReferenceMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html)

Purges stale mappings from this map.

[purge(Reference<?>)](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html#purge-java.lang.ref.Reference-) - Method in class org.apache.commons.collections4.map.[AbstractReferenceMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html)

Purges the specified reference.

[purge(Reference<?>)](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html#purge-java.lang.ref.Reference-) - Method in class org.apache.commons.collections4.map.[AbstractReferenceMap.ReferenceEntry](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html)

Purges the specified reference

[purgeBeforeRead()](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html#purgeBeforeRead--) - Method in class org.apache.commons.collections4.map.[AbstractReferenceMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html)

Purges stale mappings from this map before read operations.

[purgeBeforeWrite()](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html#purgeBeforeWrite--) - Method in class org.apache.commons.collections4.map.[AbstractReferenceMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html)

Purges stale mappings from this map before write operations.

[push(E)](http://docs.google.com/org/apache/commons/collections4/ArrayStack.html#push-E-) - Method in class org.apache.commons.collections4.[ArrayStack](http://docs.google.com/org/apache/commons/collections4/ArrayStack.html)

Deprecated.

Pushes a new item onto the top of this stack.

[pushback(E)](http://docs.google.com/org/apache/commons/collections4/iterators/PushbackIterator.html#pushback-E-) - Method in class org.apache.commons.collections4.iterators.[PushbackIterator](http://docs.google.com/org/apache/commons/collections4/iterators/PushbackIterator.html)

Push back the given element to the iterator.

[PushbackIterator](http://docs.google.com/org/apache/commons/collections4/iterators/PushbackIterator.html)<[E](http://docs.google.com/org/apache/commons/collections4/iterators/PushbackIterator.html)> - Class in [org.apache.commons.collections4.iterators](http://docs.google.com/org/apache/commons/collections4/iterators/package-summary.html)

Decorates an iterator to support pushback of elements.

[PushbackIterator(Iterator<? extends E>)](http://docs.google.com/org/apache/commons/collections4/iterators/PushbackIterator.html#PushbackIterator-java.util.Iterator-) - Constructor for class org.apache.commons.collections4.iterators.[PushbackIterator](http://docs.google.com/org/apache/commons/collections4/iterators/PushbackIterator.html)

Constructor.

[pushbackIterator(Iterator<? extends E>)](http://docs.google.com/org/apache/commons/collections4/iterators/PushbackIterator.html#pushbackIterator-java.util.Iterator-) - Static method in class org.apache.commons.collections4.iterators.[PushbackIterator](http://docs.google.com/org/apache/commons/collections4/iterators/PushbackIterator.html)

Decorates the specified iterator to support one-element lookahead.

[pushbackIterator(Iterator<? extends E>)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#pushbackIterator-java.util.Iterator-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets an iterator that supports pushback of elements.

[put(K, V)](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html#put-K-V-) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html)   [put(K, V)](http://docs.google.com/org/apache/commons/collections4/BidiMap.html#put-K-V-) - Method in interface org.apache.commons.collections4.[BidiMap](http://docs.google.com/org/apache/commons/collections4/BidiMap.html)

Puts the key-value pair into the map, replacing any previous pair.

[put(K, V)](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html#put-K-V-) - Method in class org.apache.commons.collections4.bidimap.[TreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html)

Puts the key-value pair into the map, replacing any previous pair.

[put(K, V)](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableBidiMap.html#put-K-V-) - Method in class org.apache.commons.collections4.bidimap.[UnmodifiableBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableBidiMap.html)   [put(K, V)](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableOrderedBidiMap.html#put-K-V-) - Method in class org.apache.commons.collections4.bidimap.[UnmodifiableOrderedBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableOrderedBidiMap.html)   [put(K, V)](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableSortedBidiMap.html#put-K-V-) - Method in class org.apache.commons.collections4.bidimap.[UnmodifiableSortedBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableSortedBidiMap.html)   [put(K, V)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#put-K-V-) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Puts a key-value mapping into this map.

[put(K, V)](http://docs.google.com/org/apache/commons/collections4/map/AbstractMapDecorator.html#put-K-V-) - Method in class org.apache.commons.collections4.map.[AbstractMapDecorator](http://docs.google.com/org/apache/commons/collections4/map/AbstractMapDecorator.html)   [put(K, V)](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html#put-K-V-) - Method in class org.apache.commons.collections4.map.[AbstractReferenceMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html)

Puts a key-value mapping into this map.

[put(CompositeMap<K, V>, Map<K, V>[], K, V)](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.MapMutator.html#put-org.apache.commons.collections4.map.CompositeMap-java.util.Map:A-K-V-) - Method in interface org.apache.commons.collections4.map.[CompositeMap.MapMutator](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.MapMutator.html)

Called when the CompositeMap.put() method is invoked.

[put(K, V)](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html#put-K-V-) - Method in class org.apache.commons.collections4.map.[CompositeMap](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html)

Associates the specified value with the specified key in this map (optional operation).

[put(K, V)](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeMap.html#put-K-V-) - Method in class org.apache.commons.collections4.map.[FixedSizeMap](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeMap.html)   [put(K, V)](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeSortedMap.html#put-K-V-) - Method in class org.apache.commons.collections4.map.[FixedSizeSortedMap](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeSortedMap.html)   [put(K, V)](http://docs.google.com/org/apache/commons/collections4/map/Flat3Map.html#put-K-V-) - Method in class org.apache.commons.collections4.map.[Flat3Map](http://docs.google.com/org/apache/commons/collections4/map/Flat3Map.html)

Puts a key-value mapping into this map.

[put(K, V)](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html#put-K-V-) - Method in class org.apache.commons.collections4.map.[ListOrderedMap](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html)   [put(int, K, V)](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html#put-int-K-V-) - Method in class org.apache.commons.collections4.map.[ListOrderedMap](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html)

Puts a key-value mapping into the map at the specified index.

[put(K, K, V)](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html#put-K-K-V-) - Method in class org.apache.commons.collections4.map.[MultiKeyMap](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html)

Stores the value against the specified multi-key.

[put(K, K, K, V)](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html#put-K-K-K-V-) - Method in class org.apache.commons.collections4.map.[MultiKeyMap](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html)

Stores the value against the specified multi-key.

[put(K, K, K, K, V)](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html#put-K-K-K-K-V-) - Method in class org.apache.commons.collections4.map.[MultiKeyMap](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html)

Stores the value against the specified multi-key.

[put(K, K, K, K, K, V)](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html#put-K-K-K-K-K-V-) - Method in class org.apache.commons.collections4.map.[MultiKeyMap](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html)

Stores the value against the specified multi-key.

[put(MultiKey<? extends K>, V)](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html#put-org.apache.commons.collections4.keyvalue.MultiKey-V-) - Method in class org.apache.commons.collections4.map.[MultiKeyMap](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html)

Puts the key and value into the map, where the key must be a non-null MultiKey object.

[put(K, Object)](http://docs.google.com/org/apache/commons/collections4/map/MultiValueMap.html#put-K-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[MultiValueMap](http://docs.google.com/org/apache/commons/collections4/map/MultiValueMap.html)

Deprecated.

Adds the value to the collection associated with the specified key.

[put(K, V)](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.html#put-K-V-) - Method in class org.apache.commons.collections4.map.[PassiveExpiringMap](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.html)

Add the given key-value pair to this map as well as recording the entry's expiration time based on the current time in milliseconds and this map's [PassiveExpiringMap.expiringPolicy](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.html#expiringPolicy).

[put(K, V)](http://docs.google.com/org/apache/commons/collections4/map/PredicatedMap.html#put-K-V-) - Method in class org.apache.commons.collections4.map.[PredicatedMap](http://docs.google.com/org/apache/commons/collections4/map/PredicatedMap.html)   [put(K, V)](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html#put-K-V-) - Method in class org.apache.commons.collections4.map.[SingletonMap](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html)

Puts a key-value mapping into this map where the key must match the existing key.

[put(K, V)](http://docs.google.com/org/apache/commons/collections4/map/StaticBucketMap.html#put-K-V-) - Method in class org.apache.commons.collections4.map.[StaticBucketMap](http://docs.google.com/org/apache/commons/collections4/map/StaticBucketMap.html)

Puts a new key value mapping into the map.

[put(K, V)](http://docs.google.com/org/apache/commons/collections4/map/TransformedMap.html#put-K-V-) - Method in class org.apache.commons.collections4.map.[TransformedMap](http://docs.google.com/org/apache/commons/collections4/map/TransformedMap.html)   [put(K, V)](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableMap.html#put-K-V-) - Method in class org.apache.commons.collections4.map.[UnmodifiableMap](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableMap.html)   [put(K, V)](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableOrderedMap.html#put-K-V-) - Method in class org.apache.commons.collections4.map.[UnmodifiableOrderedMap](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableOrderedMap.html)   [put(K, V)](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableSortedMap.html#put-K-V-) - Method in class org.apache.commons.collections4.map.[UnmodifiableSortedMap](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableSortedMap.html)   [put(K, V)](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html#put-K-V-) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html)

Adds the value to the collection associated with the specified key.

[put(K, V)](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html#put-K-V-) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMapDecorator](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html)   [put(K, Object)](http://docs.google.com/org/apache/commons/collections4/MultiMap.html#put-K-java.lang.Object-) - Method in interface org.apache.commons.collections4.[MultiMap](http://docs.google.com/org/apache/commons/collections4/MultiMap.html)

Deprecated.

Adds the value to the collection associated with the specified key.

[put(K, V)](http://docs.google.com/org/apache/commons/collections4/multimap/TransformedMultiValuedMap.html#put-K-V-) - Method in class org.apache.commons.collections4.multimap.[TransformedMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/TransformedMultiValuedMap.html)   [put(K, V)](http://docs.google.com/org/apache/commons/collections4/multimap/UnmodifiableMultiValuedMap.html#put-K-V-) - Method in class org.apache.commons.collections4.multimap.[UnmodifiableMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/UnmodifiableMultiValuedMap.html)   [put(K, V)](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html#put-K-V-) - Method in interface org.apache.commons.collections4.[MultiValuedMap](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html)

Adds a key-value mapping to this multi-valued map.

[Put](http://docs.google.com/org/apache/commons/collections4/Put.html)<[K](http://docs.google.com/org/apache/commons/collections4/Put.html),[V](http://docs.google.com/org/apache/commons/collections4/Put.html)> - Interface in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

The "write" subset of the [Map](https://docs.oracle.com/javase/7/docs/api/java/util/Map.html?is-external=true) interface.

[put(K, V)](http://docs.google.com/org/apache/commons/collections4/Put.html#put-K-V-) - Method in interface org.apache.commons.collections4.[Put](http://docs.google.com/org/apache/commons/collections4/Put.html)

Note that the return type is Object, rather than V as in the Map interface.

[put(J, U)](http://docs.google.com/org/apache/commons/collections4/splitmap/TransformedSplitMap.html#put-J-U-) - Method in class org.apache.commons.collections4.splitmap.[TransformedSplitMap](http://docs.google.com/org/apache/commons/collections4/splitmap/TransformedSplitMap.html)   [put(K, V)](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html#put-K-V-) - Method in class org.apache.commons.collections4.trie.[UnmodifiableTrie](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html)   [putAll(Map<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html#putAll-java.util.Map-) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html)   [putAll(Map<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html#putAll-java.util.Map-) - Method in class org.apache.commons.collections4.bidimap.[TreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html)

Puts all the mappings from the specified map into this map.

[putAll(Map<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableBidiMap.html#putAll-java.util.Map-) - Method in class org.apache.commons.collections4.bidimap.[UnmodifiableBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableBidiMap.html)   [putAll(Map<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableOrderedBidiMap.html#putAll-java.util.Map-) - Method in class org.apache.commons.collections4.bidimap.[UnmodifiableOrderedBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableOrderedBidiMap.html)   [putAll(Map<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableSortedBidiMap.html#putAll-java.util.Map-) - Method in class org.apache.commons.collections4.bidimap.[UnmodifiableSortedBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableSortedBidiMap.html)   [putAll(Map<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#putAll-java.util.Map-) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Puts all the values from the specified map into this map.

[putAll(Map<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/AbstractMapDecorator.html#putAll-java.util.Map-) - Method in class org.apache.commons.collections4.map.[AbstractMapDecorator](http://docs.google.com/org/apache/commons/collections4/map/AbstractMapDecorator.html)   [putAll(CompositeMap<K, V>, Map<K, V>[], Map<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.MapMutator.html#putAll-org.apache.commons.collections4.map.CompositeMap-java.util.Map:A-java.util.Map-) - Method in interface org.apache.commons.collections4.map.[CompositeMap.MapMutator](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.MapMutator.html)

Called when the CompositeMap.putAll() method is invoked.

[putAll(Map<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html#putAll-java.util.Map-) - Method in class org.apache.commons.collections4.map.[CompositeMap](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html)

Copies all of the mappings from the specified map to this map (optional operation).

[putAll(Map<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeMap.html#putAll-java.util.Map-) - Method in class org.apache.commons.collections4.map.[FixedSizeMap](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeMap.html)   [putAll(Map<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeSortedMap.html#putAll-java.util.Map-) - Method in class org.apache.commons.collections4.map.[FixedSizeSortedMap](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeSortedMap.html)   [putAll(Map<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/Flat3Map.html#putAll-java.util.Map-) - Method in class org.apache.commons.collections4.map.[Flat3Map](http://docs.google.com/org/apache/commons/collections4/map/Flat3Map.html)

Puts all the values from the specified map into this map.

[putAll(Map<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html#putAll-java.util.Map-) - Method in class org.apache.commons.collections4.map.[ListOrderedMap](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html)   [putAll(int, Map<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html#putAll-int-java.util.Map-) - Method in class org.apache.commons.collections4.map.[ListOrderedMap](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html)

Puts the values contained in a supplied Map into the Map starting at the specified index.

[putAll(Map<? extends MultiKey<? extends K>, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html#putAll-java.util.Map-) - Method in class org.apache.commons.collections4.map.[MultiKeyMap](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html)

Copies all of the keys and values from the specified map to this map.

[putAll(Map<? extends K, ?>)](http://docs.google.com/org/apache/commons/collections4/map/MultiValueMap.html#putAll-java.util.Map-) - Method in class org.apache.commons.collections4.map.[MultiValueMap](http://docs.google.com/org/apache/commons/collections4/map/MultiValueMap.html)

Deprecated.

Override superclass to ensure that MultiMap instances are correctly handled.

[putAll(K, Collection<V>)](http://docs.google.com/org/apache/commons/collections4/map/MultiValueMap.html#putAll-K-java.util.Collection-) - Method in class org.apache.commons.collections4.map.[MultiValueMap](http://docs.google.com/org/apache/commons/collections4/map/MultiValueMap.html)

Deprecated.

Adds a collection of values to the collection associated with the specified key.

[putAll(Map<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.html#putAll-java.util.Map-) - Method in class org.apache.commons.collections4.map.[PassiveExpiringMap](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.html)   [putAll(Map<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/PredicatedMap.html#putAll-java.util.Map-) - Method in class org.apache.commons.collections4.map.[PredicatedMap](http://docs.google.com/org/apache/commons/collections4/map/PredicatedMap.html)   [putAll(Map<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html#putAll-java.util.Map-) - Method in class org.apache.commons.collections4.map.[SingletonMap](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html)

Puts the values from the specified map into this map.

[putAll(Map<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/StaticBucketMap.html#putAll-java.util.Map-) - Method in class org.apache.commons.collections4.map.[StaticBucketMap](http://docs.google.com/org/apache/commons/collections4/map/StaticBucketMap.html)

Puts all the entries from the specified map into this map.

[putAll(Map<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/TransformedMap.html#putAll-java.util.Map-) - Method in class org.apache.commons.collections4.map.[TransformedMap](http://docs.google.com/org/apache/commons/collections4/map/TransformedMap.html)   [putAll(Map<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableMap.html#putAll-java.util.Map-) - Method in class org.apache.commons.collections4.map.[UnmodifiableMap](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableMap.html)   [putAll(Map<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableOrderedMap.html#putAll-java.util.Map-) - Method in class org.apache.commons.collections4.map.[UnmodifiableOrderedMap](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableOrderedMap.html)   [putAll(Map<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableSortedMap.html#putAll-java.util.Map-) - Method in class org.apache.commons.collections4.map.[UnmodifiableSortedMap](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableSortedMap.html)   [putAll(Map<K, V>, Object[])](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#putAll-java.util.Map-java.lang.Object:A-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Puts all the keys and values from the specified array into the map.

[putAll(Map<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html#putAll-java.util.Map-) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html)

Copies all of the mappings from the specified map to this map.

[putAll(MultiValuedMap<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html#putAll-org.apache.commons.collections4.MultiValuedMap-) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html)

Copies all of the mappings from the specified MultiValuedMap to this map.

[putAll(K, Iterable<? extends V>)](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html#putAll-K-java.lang.Iterable-) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html)

Adds Iterable values to the collection associated with the specified key.

[putAll(K, Iterable<? extends V>)](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html#putAll-K-java.lang.Iterable-) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMapDecorator](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html)   [putAll(Map<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html#putAll-java.util.Map-) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMapDecorator](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html)   [putAll(MultiValuedMap<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html#putAll-org.apache.commons.collections4.MultiValuedMap-) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMapDecorator](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html)   [putAll(K, Iterable<? extends V>)](http://docs.google.com/org/apache/commons/collections4/multimap/TransformedMultiValuedMap.html#putAll-K-java.lang.Iterable-) - Method in class org.apache.commons.collections4.multimap.[TransformedMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/TransformedMultiValuedMap.html)   [putAll(Map<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/multimap/TransformedMultiValuedMap.html#putAll-java.util.Map-) - Method in class org.apache.commons.collections4.multimap.[TransformedMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/TransformedMultiValuedMap.html)   [putAll(MultiValuedMap<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/multimap/TransformedMultiValuedMap.html#putAll-org.apache.commons.collections4.MultiValuedMap-) - Method in class org.apache.commons.collections4.multimap.[TransformedMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/TransformedMultiValuedMap.html)   [putAll(K, Iterable<? extends V>)](http://docs.google.com/org/apache/commons/collections4/multimap/UnmodifiableMultiValuedMap.html#putAll-K-java.lang.Iterable-) - Method in class org.apache.commons.collections4.multimap.[UnmodifiableMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/UnmodifiableMultiValuedMap.html)   [putAll(Map<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/multimap/UnmodifiableMultiValuedMap.html#putAll-java.util.Map-) - Method in class org.apache.commons.collections4.multimap.[UnmodifiableMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/UnmodifiableMultiValuedMap.html)   [putAll(MultiValuedMap<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/multimap/UnmodifiableMultiValuedMap.html#putAll-org.apache.commons.collections4.MultiValuedMap-) - Method in class org.apache.commons.collections4.multimap.[UnmodifiableMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/UnmodifiableMultiValuedMap.html)   [putAll(K, Iterable<? extends V>)](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html#putAll-K-java.lang.Iterable-) - Method in interface org.apache.commons.collections4.[MultiValuedMap](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html)

Adds a mapping to the specified key for all values contained in the given Iterable.

[putAll(Map<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html#putAll-java.util.Map-) - Method in interface org.apache.commons.collections4.[MultiValuedMap](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html)

Copies all mappings from the specified map to this multi-valued map (optional operation).

[putAll(MultiValuedMap<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html#putAll-org.apache.commons.collections4.MultiValuedMap-) - Method in interface org.apache.commons.collections4.[MultiValuedMap](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html)

Copies all mappings from the specified map to this multi-valued map (optional operation).

## [putAll(Map<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/Put.html#putAll-java.util.Map-) - Method in interface org.apache.commons.collections4.[Put](http://docs.google.com/org/apache/commons/collections4/Put.html)   [putAll(Map<? extends J, ? extends U>)](http://docs.google.com/org/apache/commons/collections4/splitmap/TransformedSplitMap.html#putAll-java.util.Map-) - Method in class org.apache.commons.collections4.splitmap.[TransformedSplitMap](http://docs.google.com/org/apache/commons/collections4/splitmap/TransformedSplitMap.html)   [putAll(Map<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html#putAll-java.util.Map-) - Method in class org.apache.commons.collections4.trie.[UnmodifiableTrie](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html)

Q

[QueueUtils](http://docs.google.com/org/apache/commons/collections4/QueueUtils.html) - Class in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

Provides utility methods and decorators for [Queue](https://docs.oracle.com/javase/7/docs/api/java/util/Queue.html?is-external=true) instances.

## R

[rangeCheck(int, int)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedSubList.html#rangeCheck-int-int-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList.LinkedSubList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedSubList.html)   [readableMap(Get<K, V>)](http://docs.google.com/org/apache/commons/collections4/SplitMapUtils.html#readableMap-org.apache.commons.collections4.Get-) - Static method in class org.apache.commons.collections4.[SplitMapUtils](http://docs.google.com/org/apache/commons/collections4/SplitMapUtils.html)

Get the specified [Get](http://docs.google.com/org/apache/commons/collections4/Get.html) as an instance of [IterableMap](http://docs.google.com/org/apache/commons/collections4/IterableMap.html).

[readResolve()](http://docs.google.com/org/apache/commons/collections4/keyvalue/MultiKey.html#readResolve--) - Method in class org.apache.commons.collections4.keyvalue.[MultiKey](http://docs.google.com/org/apache/commons/collections4/keyvalue/MultiKey.html)

Recalculate the hash code after deserialization.

[ReferenceEntry(AbstractReferenceMap<K, V>, AbstractHashedMap.HashEntry<K, V>, int, K, V)](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html#ReferenceEntry-org.apache.commons.collections4.map.AbstractReferenceMap-org.apache.commons.collections4.map.AbstractHashedMap.HashEntry-int-K-V-) - Constructor for class org.apache.commons.collections4.map.[AbstractReferenceMap.ReferenceEntry](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html)

Creates a new entry object for the ReferenceMap.

[ReferenceIdentityMap](http://docs.google.com/org/apache/commons/collections4/map/ReferenceIdentityMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/ReferenceIdentityMap.html),[V](http://docs.google.com/org/apache/commons/collections4/map/ReferenceIdentityMap.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

A Map implementation that allows mappings to be removed by the garbage collector and matches keys and values based on == not equals().

[ReferenceIdentityMap()](http://docs.google.com/org/apache/commons/collections4/map/ReferenceIdentityMap.html#ReferenceIdentityMap--) - Constructor for class org.apache.commons.collections4.map.[ReferenceIdentityMap](http://docs.google.com/org/apache/commons/collections4/map/ReferenceIdentityMap.html)

Constructs a new ReferenceIdentityMap that will use hard references to keys and soft references to values.

[ReferenceIdentityMap(AbstractReferenceMap.ReferenceStrength, AbstractReferenceMap.ReferenceStrength)](http://docs.google.com/org/apache/commons/collections4/map/ReferenceIdentityMap.html#ReferenceIdentityMap-org.apache.commons.collections4.map.AbstractReferenceMap.ReferenceStrength-org.apache.commons.collections4.map.AbstractReferenceMap.ReferenceStrength-) - Constructor for class org.apache.commons.collections4.map.[ReferenceIdentityMap](http://docs.google.com/org/apache/commons/collections4/map/ReferenceIdentityMap.html)

Constructs a new ReferenceIdentityMap that will use the specified types of references.

[ReferenceIdentityMap(AbstractReferenceMap.ReferenceStrength, AbstractReferenceMap.ReferenceStrength, boolean)](http://docs.google.com/org/apache/commons/collections4/map/ReferenceIdentityMap.html#ReferenceIdentityMap-org.apache.commons.collections4.map.AbstractReferenceMap.ReferenceStrength-org.apache.commons.collections4.map.AbstractReferenceMap.ReferenceStrength-boolean-) - Constructor for class org.apache.commons.collections4.map.[ReferenceIdentityMap](http://docs.google.com/org/apache/commons/collections4/map/ReferenceIdentityMap.html)

Constructs a new ReferenceIdentityMap that will use the specified types of references.

[ReferenceIdentityMap(AbstractReferenceMap.ReferenceStrength, AbstractReferenceMap.ReferenceStrength, int, float)](http://docs.google.com/org/apache/commons/collections4/map/ReferenceIdentityMap.html#ReferenceIdentityMap-org.apache.commons.collections4.map.AbstractReferenceMap.ReferenceStrength-org.apache.commons.collections4.map.AbstractReferenceMap.ReferenceStrength-int-float-) - Constructor for class org.apache.commons.collections4.map.[ReferenceIdentityMap](http://docs.google.com/org/apache/commons/collections4/map/ReferenceIdentityMap.html)

Constructs a new ReferenceIdentityMap with the specified reference types, load factor and initial capacity.

[ReferenceIdentityMap(AbstractReferenceMap.ReferenceStrength, AbstractReferenceMap.ReferenceStrength, int, float, boolean)](http://docs.google.com/org/apache/commons/collections4/map/ReferenceIdentityMap.html#ReferenceIdentityMap-org.apache.commons.collections4.map.AbstractReferenceMap.ReferenceStrength-org.apache.commons.collections4.map.AbstractReferenceMap.ReferenceStrength-int-float-boolean-) - Constructor for class org.apache.commons.collections4.map.[ReferenceIdentityMap](http://docs.google.com/org/apache/commons/collections4/map/ReferenceIdentityMap.html)

Constructs a new ReferenceIdentityMap with the specified reference types, load factor and initial capacity.

[ReferenceMap](http://docs.google.com/org/apache/commons/collections4/map/ReferenceMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/ReferenceMap.html),[V](http://docs.google.com/org/apache/commons/collections4/map/ReferenceMap.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

A Map implementation that allows mappings to be removed by the garbage collector.

[ReferenceMap()](http://docs.google.com/org/apache/commons/collections4/map/ReferenceMap.html#ReferenceMap--) - Constructor for class org.apache.commons.collections4.map.[ReferenceMap](http://docs.google.com/org/apache/commons/collections4/map/ReferenceMap.html)

Constructs a new ReferenceMap that will use hard references to keys and soft references to values.

[ReferenceMap(AbstractReferenceMap.ReferenceStrength, AbstractReferenceMap.ReferenceStrength)](http://docs.google.com/org/apache/commons/collections4/map/ReferenceMap.html#ReferenceMap-org.apache.commons.collections4.map.AbstractReferenceMap.ReferenceStrength-org.apache.commons.collections4.map.AbstractReferenceMap.ReferenceStrength-) - Constructor for class org.apache.commons.collections4.map.[ReferenceMap](http://docs.google.com/org/apache/commons/collections4/map/ReferenceMap.html)

Constructs a new ReferenceMap that will use the specified types of references.

[ReferenceMap(AbstractReferenceMap.ReferenceStrength, AbstractReferenceMap.ReferenceStrength, boolean)](http://docs.google.com/org/apache/commons/collections4/map/ReferenceMap.html#ReferenceMap-org.apache.commons.collections4.map.AbstractReferenceMap.ReferenceStrength-org.apache.commons.collections4.map.AbstractReferenceMap.ReferenceStrength-boolean-) - Constructor for class org.apache.commons.collections4.map.[ReferenceMap](http://docs.google.com/org/apache/commons/collections4/map/ReferenceMap.html)

Constructs a new ReferenceMap that will use the specified types of references.

[ReferenceMap(AbstractReferenceMap.ReferenceStrength, AbstractReferenceMap.ReferenceStrength, int, float)](http://docs.google.com/org/apache/commons/collections4/map/ReferenceMap.html#ReferenceMap-org.apache.commons.collections4.map.AbstractReferenceMap.ReferenceStrength-org.apache.commons.collections4.map.AbstractReferenceMap.ReferenceStrength-int-float-) - Constructor for class org.apache.commons.collections4.map.[ReferenceMap](http://docs.google.com/org/apache/commons/collections4/map/ReferenceMap.html)

Constructs a new ReferenceMap with the specified reference types, load factor and initial capacity.

[ReferenceMap(AbstractReferenceMap.ReferenceStrength, AbstractReferenceMap.ReferenceStrength, int, float, boolean)](http://docs.google.com/org/apache/commons/collections4/map/ReferenceMap.html#ReferenceMap-org.apache.commons.collections4.map.AbstractReferenceMap.ReferenceStrength-org.apache.commons.collections4.map.AbstractReferenceMap.ReferenceStrength-int-float-boolean-) - Constructor for class org.apache.commons.collections4.map.[ReferenceMap](http://docs.google.com/org/apache/commons/collections4/map/ReferenceMap.html)

Constructs a new ReferenceMap with the specified reference types, load factor and initial capacity.

[registerCursor(CursorableLinkedList.Cursor<E>)](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.html#registerCursor-org.apache.commons.collections4.list.CursorableLinkedList.Cursor-) - Method in class org.apache.commons.collections4.list.[CursorableLinkedList](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.html)

Registers a cursor to be notified of changes to this list.

[reindex()](http://docs.google.com/org/apache/commons/collections4/collection/IndexedCollection.html#reindex--) - Method in class org.apache.commons.collections4.collection.[IndexedCollection](http://docs.google.com/org/apache/commons/collections4/collection/IndexedCollection.html)

Clears the index and re-indexes the entire decorated [Collection](https://docs.oracle.com/javase/7/docs/api/java/util/Collection.html?is-external=true).

[rejectedElements()](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.Builder.html#rejectedElements--) - Method in class org.apache.commons.collections4.collection.[PredicatedCollection.Builder](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.Builder.html)

Returns an unmodifiable collection containing all rejected elements.

[remove(Object, int)](http://docs.google.com/org/apache/commons/collections4/bag/AbstractBagDecorator.html#remove-java.lang.Object-int-) - Method in class org.apache.commons.collections4.bag.[AbstractBagDecorator](http://docs.google.com/org/apache/commons/collections4/bag/AbstractBagDecorator.html)   [remove(Object)](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.bag.[AbstractMapBag](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html)

Removes all copies of the specified object from the bag.

[remove(Object, int)](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html#remove-java.lang.Object-int-) - Method in class org.apache.commons.collections4.bag.[AbstractMapBag](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html)

Removes a specified number of copies of an object from the bag.

[remove(Object)](http://docs.google.com/org/apache/commons/collections4/bag/CollectionBag.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.bag.[CollectionBag](http://docs.google.com/org/apache/commons/collections4/bag/CollectionBag.html)

*(Change)* Removes the first occurrence of the given object from the bag.

[remove(Object)](http://docs.google.com/org/apache/commons/collections4/bag/CollectionSortedBag.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.bag.[CollectionSortedBag](http://docs.google.com/org/apache/commons/collections4/bag/CollectionSortedBag.html)   [remove(Object, int)](http://docs.google.com/org/apache/commons/collections4/bag/PredicatedBag.html#remove-java.lang.Object-int-) - Method in class org.apache.commons.collections4.bag.[PredicatedBag](http://docs.google.com/org/apache/commons/collections4/bag/PredicatedBag.html)   [remove(Object)](http://docs.google.com/org/apache/commons/collections4/Bag.html#remove-java.lang.Object-) - Method in interface org.apache.commons.collections4.[Bag](http://docs.google.com/org/apache/commons/collections4/Bag.html)

*(Violation)* Removes all occurrences of the given object from the bag.

[remove(Object, int)](http://docs.google.com/org/apache/commons/collections4/Bag.html#remove-java.lang.Object-int-) - Method in interface org.apache.commons.collections4.[Bag](http://docs.google.com/org/apache/commons/collections4/Bag.html)

Removes nCopies copies of the specified object from the Bag.

[remove(Object, int)](http://docs.google.com/org/apache/commons/collections4/bag/SynchronizedBag.html#remove-java.lang.Object-int-) - Method in class org.apache.commons.collections4.bag.[SynchronizedBag](http://docs.google.com/org/apache/commons/collections4/bag/SynchronizedBag.html)   [remove(Object, int)](http://docs.google.com/org/apache/commons/collections4/bag/TransformedBag.html#remove-java.lang.Object-int-) - Method in class org.apache.commons.collections4.bag.[TransformedBag](http://docs.google.com/org/apache/commons/collections4/bag/TransformedBag.html)   [remove(Object)](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableBag.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.bag.[UnmodifiableBag](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableBag.html)   [remove(Object, int)](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableBag.html#remove-java.lang.Object-int-) - Method in class org.apache.commons.collections4.bag.[UnmodifiableBag](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableBag.html)   [remove(Object)](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableSortedBag.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.bag.[UnmodifiableSortedBag](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableSortedBag.html)   [remove(Object, int)](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableSortedBag.html#remove-java.lang.Object-int-) - Method in class org.apache.commons.collections4.bag.[UnmodifiableSortedBag](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableSortedBag.html)   [remove()](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.BidiMapIterator.html#remove--) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.BidiMapIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.BidiMapIterator.html)   [remove(Object)](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.EntrySet.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.EntrySet](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.EntrySet.html)   [remove()](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.EntrySetIterator.html#remove--) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.EntrySetIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.EntrySetIterator.html)   [remove(Object)](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.KeySet.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.KeySet](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.KeySet.html)   [remove()](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.KeySetIterator.html#remove--) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.KeySetIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.KeySetIterator.html)   [remove(Object)](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html)   [remove(Object)](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.Values.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.Values](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.Values.html)   [remove()](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.ValuesIterator.html#remove--) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.ValuesIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.ValuesIterator.html)   [remove()](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.BidiOrderedMapIterator.html#remove--) - Method in class org.apache.commons.collections4.bidimap.[DualTreeBidiMap.BidiOrderedMapIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.BidiOrderedMapIterator.html)   [remove(Object)](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.bidimap.[TreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html)

Removes the mapping for this key from this map if present.

[remove(Object)](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableBidiMap.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.bidimap.[UnmodifiableBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableBidiMap.html)   [remove(Object)](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableOrderedBidiMap.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.bidimap.[UnmodifiableOrderedBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableOrderedBidiMap.html)   [remove(Object)](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableSortedBidiMap.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.bidimap.[UnmodifiableSortedBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableSortedBidiMap.html)   [remove(Object)](http://docs.google.com/org/apache/commons/collections4/collection/AbstractCollectionDecorator.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.collection.[AbstractCollectionDecorator](http://docs.google.com/org/apache/commons/collections4/collection/AbstractCollectionDecorator.html)   [remove(CompositeCollection<E>, List<Collection<E>>, Object)](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.CollectionMutator.html#remove-org.apache.commons.collections4.collection.CompositeCollection-java.util.List-java.lang.Object-) - Method in interface org.apache.commons.collections4.collection.[CompositeCollection.CollectionMutator](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.CollectionMutator.html)

Called when an object is to be removed to the composite.

[remove(Object)](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.collection.[CompositeCollection](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html)

Removes an object from the collection, throwing UnsupportedOperationException unless a CollectionMutator strategy is specified.

[remove(Object)](http://docs.google.com/org/apache/commons/collections4/collection/IndexedCollection.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.collection.[IndexedCollection](http://docs.google.com/org/apache/commons/collections4/collection/IndexedCollection.html)   [remove(Object)](http://docs.google.com/org/apache/commons/collections4/collection/SynchronizedCollection.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.collection.[SynchronizedCollection](http://docs.google.com/org/apache/commons/collections4/collection/SynchronizedCollection.html)   [remove(Object)](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableBoundedCollection.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.collection.[UnmodifiableBoundedCollection](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableBoundedCollection.html)   [remove(Object)](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableCollection.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.collection.[UnmodifiableCollection](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableCollection.html)   [remove(Object)](http://docs.google.com/org/apache/commons/collections4/Get.html#remove-java.lang.Object-) - Method in interface org.apache.commons.collections4.[Get](http://docs.google.com/org/apache/commons/collections4/Get.html)   [remove()](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractListIteratorDecorator.html#remove--) - Method in class org.apache.commons.collections4.iterators.[AbstractListIteratorDecorator](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractListIteratorDecorator.html) [remove()](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractMapIteratorDecorator.html#remove--) - Method in class org.apache.commons.collections4.iterators.[AbstractMapIteratorDecorator](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractMapIteratorDecorator.html)

Removes the last returned key from the underlying Map (optional operation).

[remove()](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractOrderedMapIteratorDecorator.html#remove--) - Method in class org.apache.commons.collections4.iterators.[AbstractOrderedMapIteratorDecorator](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractOrderedMapIteratorDecorator.html)

Removes the last returned key from the underlying Map (optional operation).

[remove()](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractUntypedIteratorDecorator.html#remove--) - Method in class org.apache.commons.collections4.iterators.[AbstractUntypedIteratorDecorator](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractUntypedIteratorDecorator.html)   [remove()](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayIterator.html#remove--) - Method in class org.apache.commons.collections4.iterators.[ArrayIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayIterator.html)

Throws [UnsupportedOperationException](https://docs.oracle.com/javase/7/docs/api/java/lang/UnsupportedOperationException.html?is-external=true).

[remove()](http://docs.google.com/org/apache/commons/collections4/iterators/BoundedIterator.html#remove--) - Method in class org.apache.commons.collections4.iterators.[BoundedIterator](http://docs.google.com/org/apache/commons/collections4/iterators/BoundedIterator.html) [remove()](http://docs.google.com/org/apache/commons/collections4/iterators/CollatingIterator.html#remove--) - Method in class org.apache.commons.collections4.iterators.[CollatingIterator](http://docs.google.com/org/apache/commons/collections4/iterators/CollatingIterator.html)

Removes the last returned element from the child iterator that produced it.

[remove()](http://docs.google.com/org/apache/commons/collections4/iterators/EntrySetMapIterator.html#remove--) - Method in class org.apache.commons.collections4.iterators.[EntrySetMapIterator](http://docs.google.com/org/apache/commons/collections4/iterators/EntrySetMapIterator.html)

Removes the last returned key from the underlying Map.

[remove()](http://docs.google.com/org/apache/commons/collections4/iterators/EnumerationIterator.html#remove--) - Method in class org.apache.commons.collections4.iterators.[EnumerationIterator](http://docs.google.com/org/apache/commons/collections4/iterators/EnumerationIterator.html)

Removes the last retrieved element if a collection is attached.

[remove()](http://docs.google.com/org/apache/commons/collections4/iterators/FilterIterator.html#remove--) - Method in class org.apache.commons.collections4.iterators.[FilterIterator](http://docs.google.com/org/apache/commons/collections4/iterators/FilterIterator.html)

Removes from the underlying collection of the base iterator the last element returned by this iterator.

[remove()](http://docs.google.com/org/apache/commons/collections4/iterators/FilterListIterator.html#remove--) - Method in class org.apache.commons.collections4.iterators.[FilterListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/FilterListIterator.html)

Not supported.

[remove()](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorChain.html#remove--) - Method in class org.apache.commons.collections4.iterators.[IteratorChain](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorChain.html)

Removes from the underlying collection the last element returned by the Iterator.

[remove()](http://docs.google.com/org/apache/commons/collections4/iterators/LazyIteratorChain.html#remove--) - Method in class org.apache.commons.collections4.iterators.[LazyIteratorChain](http://docs.google.com/org/apache/commons/collections4/iterators/LazyIteratorChain.html)

Removes from the underlying collection the last element returned by the Iterator.

[remove()](http://docs.google.com/org/apache/commons/collections4/iterators/ListIteratorWrapper.html#remove--) - Method in class org.apache.commons.collections4.iterators.[ListIteratorWrapper](http://docs.google.com/org/apache/commons/collections4/iterators/ListIteratorWrapper.html)

Throws [UnsupportedOperationException](https://docs.oracle.com/javase/7/docs/api/java/lang/UnsupportedOperationException.html?is-external=true) if [ListIteratorWrapper.previous()](http://docs.google.com/org/apache/commons/collections4/iterators/ListIteratorWrapper.html#previous--) has ever been called.

[remove()](http://docs.google.com/org/apache/commons/collections4/iterators/LoopingIterator.html#remove--) - Method in class org.apache.commons.collections4.iterators.[LoopingIterator](http://docs.google.com/org/apache/commons/collections4/iterators/LoopingIterator.html)

Removes the previously retrieved item from the underlying collection.

[remove()](http://docs.google.com/org/apache/commons/collections4/iterators/LoopingListIterator.html#remove--) - Method in class org.apache.commons.collections4.iterators.[LoopingListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/LoopingListIterator.html)

Removes the previously retrieved item from the underlying list.

[remove()](http://docs.google.com/org/apache/commons/collections4/iterators/NodeListIterator.html#remove--) - Method in class org.apache.commons.collections4.iterators.[NodeListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/NodeListIterator.html)

Throws [UnsupportedOperationException](https://docs.oracle.com/javase/7/docs/api/java/lang/UnsupportedOperationException.html?is-external=true).

[remove()](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayIterator.html#remove--) - Method in class org.apache.commons.collections4.iterators.[ObjectArrayIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayIterator.html)

Throws [UnsupportedOperationException](https://docs.oracle.com/javase/7/docs/api/java/lang/UnsupportedOperationException.html?is-external=true).

[remove()](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectGraphIterator.html#remove--) - Method in class org.apache.commons.collections4.iterators.[ObjectGraphIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectGraphIterator.html)

Removes from the underlying collection the last element returned.

[remove()](http://docs.google.com/org/apache/commons/collections4/iterators/PeekingIterator.html#remove--) - Method in class org.apache.commons.collections4.iterators.[PeekingIterator](http://docs.google.com/org/apache/commons/collections4/iterators/PeekingIterator.html) [remove()](http://docs.google.com/org/apache/commons/collections4/iterators/PermutationIterator.html#remove--) - Method in class org.apache.commons.collections4.iterators.[PermutationIterator](http://docs.google.com/org/apache/commons/collections4/iterators/PermutationIterator.html)   [remove()](http://docs.google.com/org/apache/commons/collections4/iterators/PushbackIterator.html#remove--) - Method in class org.apache.commons.collections4.iterators.[PushbackIterator](http://docs.google.com/org/apache/commons/collections4/iterators/PushbackIterator.html)

This iterator will always throw an [UnsupportedOperationException](https://docs.oracle.com/javase/7/docs/api/java/lang/UnsupportedOperationException.html?is-external=true).

[remove()](http://docs.google.com/org/apache/commons/collections4/iterators/ReverseListIterator.html#remove--) - Method in class org.apache.commons.collections4.iterators.[ReverseListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ReverseListIterator.html)

Removes the last returned element.

[remove()](http://docs.google.com/org/apache/commons/collections4/iterators/SingletonIterator.html#remove--) - Method in class org.apache.commons.collections4.iterators.[SingletonIterator](http://docs.google.com/org/apache/commons/collections4/iterators/SingletonIterator.html)

Remove the object from this iterator.

[remove()](http://docs.google.com/org/apache/commons/collections4/iterators/SingletonListIterator.html#remove--) - Method in class org.apache.commons.collections4.iterators.[SingletonListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/SingletonListIterator.html)

Remove the object from this iterator.

[remove()](http://docs.google.com/org/apache/commons/collections4/iterators/SkippingIterator.html#remove--) - Method in class org.apache.commons.collections4.iterators.[SkippingIterator](http://docs.google.com/org/apache/commons/collections4/iterators/SkippingIterator.html) [remove()](http://docs.google.com/org/apache/commons/collections4/iterators/TransformIterator.html#remove--) - Method in class org.apache.commons.collections4.iterators.[TransformIterator](http://docs.google.com/org/apache/commons/collections4/iterators/TransformIterator.html)   [remove()](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableIterator.html#remove--) - Method in class org.apache.commons.collections4.iterators.[UnmodifiableIterator](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableIterator.html)   [remove()](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableListIterator.html#remove--) - Method in class org.apache.commons.collections4.iterators.[UnmodifiableListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableListIterator.html)   [remove()](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableMapIterator.html#remove--) - Method in class org.apache.commons.collections4.iterators.[UnmodifiableMapIterator](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableMapIterator.html)   [remove()](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableOrderedMapIterator.html#remove--) - Method in class org.apache.commons.collections4.iterators.[UnmodifiableOrderedMapIterator](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableOrderedMapIterator.html)   [remove()](http://docs.google.com/org/apache/commons/collections4/iterators/ZippingIterator.html#remove--) - Method in class org.apache.commons.collections4.iterators.[ZippingIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ZippingIterator.html)

Removes the last returned element from the child iterator that produced it.

[remove()](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedListIterator.html#remove--) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList.LinkedListIterator](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedListIterator.html)   [remove(int)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedSubList.html#remove-int-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList.LinkedSubList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedSubList.html)   [remove()](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedSubListIterator.html#remove--) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList.LinkedSubListIterator](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedSubListIterator.html)   [remove(int)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#remove-int-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)   [remove(Object)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)   [remove(int)](http://docs.google.com/org/apache/commons/collections4/list/AbstractListDecorator.html#remove-int-) - Method in class org.apache.commons.collections4.list.[AbstractListDecorator](http://docs.google.com/org/apache/commons/collections4/list/AbstractListDecorator.html)   [remove()](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.Cursor.html#remove--) - Method in class org.apache.commons.collections4.list.[CursorableLinkedList.Cursor](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.Cursor.html)

Removes the item last returned by this iterator.

[remove()](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.SubCursor.html#remove--) - Method in class org.apache.commons.collections4.list.[CursorableLinkedList.SubCursor](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.SubCursor.html)   [remove(int)](http://docs.google.com/org/apache/commons/collections4/list/FixedSizeList.html#remove-int-) - Method in class org.apache.commons.collections4.list.[FixedSizeList](http://docs.google.com/org/apache/commons/collections4/list/FixedSizeList.html)   [remove(Object)](http://docs.google.com/org/apache/commons/collections4/list/FixedSizeList.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.list.[FixedSizeList](http://docs.google.com/org/apache/commons/collections4/list/FixedSizeList.html)   [remove(int)](http://docs.google.com/org/apache/commons/collections4/list/PredicatedList.html#remove-int-) - Method in class org.apache.commons.collections4.list.[PredicatedList](http://docs.google.com/org/apache/commons/collections4/list/PredicatedList.html)   [remove(Object)](http://docs.google.com/org/apache/commons/collections4/list/SetUniqueList.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.list.[SetUniqueList](http://docs.google.com/org/apache/commons/collections4/list/SetUniqueList.html)   [remove(int)](http://docs.google.com/org/apache/commons/collections4/list/SetUniqueList.html#remove-int-) - Method in class org.apache.commons.collections4.list.[SetUniqueList](http://docs.google.com/org/apache/commons/collections4/list/SetUniqueList.html)   [remove(int)](http://docs.google.com/org/apache/commons/collections4/list/TransformedList.html#remove-int-) - Method in class org.apache.commons.collections4.list.[TransformedList](http://docs.google.com/org/apache/commons/collections4/list/TransformedList.html)   [remove(int)](http://docs.google.com/org/apache/commons/collections4/list/TreeList.html#remove-int-) - Method in class org.apache.commons.collections4.list.[TreeList](http://docs.google.com/org/apache/commons/collections4/list/TreeList.html)

Removes the element at the specified index.

[remove(Object)](http://docs.google.com/org/apache/commons/collections4/list/UnmodifiableList.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.list.[UnmodifiableList](http://docs.google.com/org/apache/commons/collections4/list/UnmodifiableList.html)   [remove(int)](http://docs.google.com/org/apache/commons/collections4/list/UnmodifiableList.html#remove-int-) - Method in class org.apache.commons.collections4.list.[UnmodifiableList](http://docs.google.com/org/apache/commons/collections4/list/UnmodifiableList.html)   [remove(Object)](http://docs.google.com/org/apache/commons/collections4/ListValuedMap.html#remove-java.lang.Object-) - Method in interface org.apache.commons.collections4.[ListValuedMap](http://docs.google.com/org/apache/commons/collections4/ListValuedMap.html)

Removes all values associated with the specified key.

[remove(Object)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.EntrySet.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap.EntrySet](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.EntrySet.html)   [remove()](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashIterator.html#remove--) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap.HashIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashIterator.html)   [remove(Object)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySet.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap.KeySet](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySet.html)   [remove(Object)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Removes the specified mapping from this map.

[remove()](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkIterator.html#remove--) - Method in class org.apache.commons.collections4.map.[AbstractLinkedMap.LinkIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkIterator.html)   [remove(Object)](http://docs.google.com/org/apache/commons/collections4/map/AbstractMapDecorator.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[AbstractMapDecorator](http://docs.google.com/org/apache/commons/collections4/map/AbstractMapDecorator.html)   [remove(Object)](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[AbstractReferenceMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html)

Removes the specified mapping from this map.

[remove(Object)](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[CompositeMap](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html)

Removes the mapping for this key from this map if it is present (optional operation).

[remove()](http://docs.google.com/org/apache/commons/collections4/map/EntrySetToMapIteratorAdapter.html#remove--) - Method in class org.apache.commons.collections4.map.[EntrySetToMapIteratorAdapter](http://docs.google.com/org/apache/commons/collections4/map/EntrySetToMapIteratorAdapter.html)

Removes the last returned key from the underlying Map (optional operation).

[remove(Object)](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeMap.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[FixedSizeMap](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeMap.html)   [remove(Object)](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeSortedMap.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[FixedSizeSortedMap](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeSortedMap.html)   [remove(Object)](http://docs.google.com/org/apache/commons/collections4/map/Flat3Map.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[Flat3Map](http://docs.google.com/org/apache/commons/collections4/map/Flat3Map.html)

Removes the specified mapping from this map.

[remove(int)](http://docs.google.com/org/apache/commons/collections4/map/LinkedMap.html#remove-int-) - Method in class org.apache.commons.collections4.map.[LinkedMap](http://docs.google.com/org/apache/commons/collections4/map/LinkedMap.html)

Removes the element at the specified index.

[remove(Object)](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[ListOrderedMap](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html)   [remove(int)](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html#remove-int-) - Method in class org.apache.commons.collections4.map.[ListOrderedMap](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html)

Removes the element at the specified index.

[remove(Object)](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[PassiveExpiringMap](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.html)

Normal [Map.remove(Object)](https://docs.oracle.com/javase/7/docs/api/java/util/Map.html?is-external=true#remove-java.lang.Object-) behavior with the addition of removing any expiration entry as well.

[remove(Object)](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[SingletonMap](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html)

Unsupported operation.

[remove(Object)](http://docs.google.com/org/apache/commons/collections4/map/StaticBucketMap.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[StaticBucketMap](http://docs.google.com/org/apache/commons/collections4/map/StaticBucketMap.html)

Removes the specified key from the map.

[remove(Object)](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableEntrySet.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[UnmodifiableEntrySet](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableEntrySet.html)   [remove(Object)](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableMap.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[UnmodifiableMap](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableMap.html)   [remove(Object)](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableOrderedMap.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[UnmodifiableOrderedMap](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableOrderedMap.html)   [remove(Object)](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableSortedMap.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[UnmodifiableSortedMap](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableSortedMap.html)   [remove()](http://docs.google.com/org/apache/commons/collections4/MapIterator.html#remove--) - Method in interface org.apache.commons.collections4.[MapIterator](http://docs.google.com/org/apache/commons/collections4/MapIterator.html)

Removes the last returned key from the underlying Map (optional operation).

[remove(Object)](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractListValuedMap.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.multimap.[AbstractListValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractListValuedMap.html)

Removes all values associated with the specified key.

[remove(Object)](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html)

Removes all values associated with the specified key.

[remove(Object)](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMapDecorator](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html)   [remove(Object)](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractSetValuedMap.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.multimap.[AbstractSetValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractSetValuedMap.html)

Removes all values associated with the specified key.

[remove(Object)](http://docs.google.com/org/apache/commons/collections4/MultiMap.html#remove-java.lang.Object-) - Method in interface org.apache.commons.collections4.[MultiMap](http://docs.google.com/org/apache/commons/collections4/MultiMap.html)

Deprecated.

Removes all values associated with the specified key.

[remove(Object)](http://docs.google.com/org/apache/commons/collections4/multimap/UnmodifiableMultiValuedMap.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.multimap.[UnmodifiableMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/UnmodifiableMultiValuedMap.html)   [remove()](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.EntrySetIterator.html#remove--) - Method in class org.apache.commons.collections4.multiset.[AbstractMapMultiSet.EntrySetIterator](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.EntrySetIterator.html)   [remove(Object, int)](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.html#remove-java.lang.Object-int-) - Method in class org.apache.commons.collections4.multiset.[AbstractMapMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.html)   [remove()](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.UniqueSetIterator.html#remove--) - Method in class org.apache.commons.collections4.multiset.[AbstractMapMultiSet.UniqueSetIterator](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.UniqueSetIterator.html)   [remove(Object)](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.EntrySet.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.multiset.[AbstractMultiSet.EntrySet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.EntrySet.html)   [remove(Object)](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.multiset.[AbstractMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html)   [remove(Object, int)](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html#remove-java.lang.Object-int-) - Method in class org.apache.commons.collections4.multiset.[AbstractMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html)   [remove(Object)](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.UniqueSet.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.multiset.[AbstractMultiSet.UniqueSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.UniqueSet.html)   [remove(Object, int)](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSetDecorator.html#remove-java.lang.Object-int-) - Method in class org.apache.commons.collections4.multiset.[AbstractMultiSetDecorator](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSetDecorator.html)   [remove(Object, int)](http://docs.google.com/org/apache/commons/collections4/multiset/PredicatedMultiSet.html#remove-java.lang.Object-int-) - Method in class org.apache.commons.collections4.multiset.[PredicatedMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/PredicatedMultiSet.html)   [remove(Object)](http://docs.google.com/org/apache/commons/collections4/MultiSet.html#remove-java.lang.Object-) - Method in interface org.apache.commons.collections4.[MultiSet](http://docs.google.com/org/apache/commons/collections4/MultiSet.html)

Removes one occurrence of the given object from the MultiSet.

[remove(Object, int)](http://docs.google.com/org/apache/commons/collections4/MultiSet.html#remove-java.lang.Object-int-) - Method in interface org.apache.commons.collections4.[MultiSet](http://docs.google.com/org/apache/commons/collections4/MultiSet.html)

Removes a number of occurrences of the specified object from the MultiSet.

[remove(Object, int)](http://docs.google.com/org/apache/commons/collections4/multiset/SynchronizedMultiSet.html#remove-java.lang.Object-int-) - Method in class org.apache.commons.collections4.multiset.[SynchronizedMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/SynchronizedMultiSet.html)   [remove(Object)](http://docs.google.com/org/apache/commons/collections4/multiset/UnmodifiableMultiSet.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.multiset.[UnmodifiableMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/UnmodifiableMultiSet.html)   [remove(Object, int)](http://docs.google.com/org/apache/commons/collections4/multiset/UnmodifiableMultiSet.html#remove-java.lang.Object-int-) - Method in class org.apache.commons.collections4.multiset.[UnmodifiableMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/UnmodifiableMultiSet.html)   [remove(Object)](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html#remove-java.lang.Object-) - Method in interface org.apache.commons.collections4.[MultiValuedMap](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html)

Removes all values associated with the specified key.

[remove()](http://docs.google.com/org/apache/commons/collections4/queue/AbstractQueueDecorator.html#remove--) - Method in class org.apache.commons.collections4.queue.[AbstractQueueDecorator](http://docs.google.com/org/apache/commons/collections4/queue/AbstractQueueDecorator.html)   [remove()](http://docs.google.com/org/apache/commons/collections4/queue/CircularFifoQueue.html#remove--) - Method in class org.apache.commons.collections4.queue.[CircularFifoQueue](http://docs.google.com/org/apache/commons/collections4/queue/CircularFifoQueue.html)   [remove()](http://docs.google.com/org/apache/commons/collections4/queue/PredicatedQueue.html#remove--) - Method in class org.apache.commons.collections4.queue.[PredicatedQueue](http://docs.google.com/org/apache/commons/collections4/queue/PredicatedQueue.html)   [remove()](http://docs.google.com/org/apache/commons/collections4/queue/SynchronizedQueue.html#remove--) - Method in class org.apache.commons.collections4.queue.[SynchronizedQueue](http://docs.google.com/org/apache/commons/collections4/queue/SynchronizedQueue.html)   [remove()](http://docs.google.com/org/apache/commons/collections4/queue/TransformedQueue.html#remove--) - Method in class org.apache.commons.collections4.queue.[TransformedQueue](http://docs.google.com/org/apache/commons/collections4/queue/TransformedQueue.html)   [remove(Object)](http://docs.google.com/org/apache/commons/collections4/queue/UnmodifiableQueue.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.queue.[UnmodifiableQueue](http://docs.google.com/org/apache/commons/collections4/queue/UnmodifiableQueue.html)   [remove()](http://docs.google.com/org/apache/commons/collections4/queue/UnmodifiableQueue.html#remove--) - Method in class org.apache.commons.collections4.queue.[UnmodifiableQueue](http://docs.google.com/org/apache/commons/collections4/queue/UnmodifiableQueue.html)   [remove(Object)](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.set.[CompositeSet](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html)

If a CollectionMutator is defined for this CompositeSet then this method will be called anyway.

[remove(Object)](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.set.[ListOrderedSet](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html)   [remove(int)](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html#remove-int-) - Method in class org.apache.commons.collections4.set.[ListOrderedSet](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html)

Removes the element at the specified position from the ordered set.

[remove(Object)](http://docs.google.com/org/apache/commons/collections4/set/MapBackedSet.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.set.[MapBackedSet](http://docs.google.com/org/apache/commons/collections4/set/MapBackedSet.html)   [remove(Object)](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableNavigableSet.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.set.[UnmodifiableNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableNavigableSet.html)   [remove(Object)](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableSet.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.set.[UnmodifiableSet](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableSet.html)   [remove(Object)](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableSortedSet.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.set.[UnmodifiableSortedSet](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableSortedSet.html)   [remove(Object)](http://docs.google.com/org/apache/commons/collections4/SetValuedMap.html#remove-java.lang.Object-) - Method in interface org.apache.commons.collections4.[SetValuedMap](http://docs.google.com/org/apache/commons/collections4/SetValuedMap.html)

Removes all values associated with the specified key.

[remove(Object)](http://docs.google.com/org/apache/commons/collections4/splitmap/AbstractIterableGetMapDecorator.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.splitmap.[AbstractIterableGetMapDecorator](http://docs.google.com/org/apache/commons/collections4/splitmap/AbstractIterableGetMapDecorator.html)   [remove(Object)](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html#remove-java.lang.Object-) - Method in class org.apache.commons.collections4.trie.[UnmodifiableTrie](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html)   [REMOVE\_INVALID](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#REMOVE_INVALID) - Static variable in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)   [removeAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html#removeAll-java.util.Collection-) - Method in class org.apache.commons.collections4.bag.[AbstractMapBag](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html)

Removes objects from the bag according to their count in the specified collection.

[removeAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/bag/CollectionBag.html#removeAll-java.util.Collection-) - Method in class org.apache.commons.collections4.bag.[CollectionBag](http://docs.google.com/org/apache/commons/collections4/bag/CollectionBag.html)

*(Change)* Remove all elements represented in the given collection, **not** respecting cardinality.

[removeAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/bag/CollectionSortedBag.html#removeAll-java.util.Collection-) - Method in class org.apache.commons.collections4.bag.[CollectionSortedBag](http://docs.google.com/org/apache/commons/collections4/bag/CollectionSortedBag.html)   [removeAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/Bag.html#removeAll-java.util.Collection-) - Method in interface org.apache.commons.collections4.[Bag](http://docs.google.com/org/apache/commons/collections4/Bag.html)

*(Violation)* Remove all elements represented in the given collection, respecting cardinality.

[removeAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableBag.html#removeAll-java.util.Collection-) - Method in class org.apache.commons.collections4.bag.[UnmodifiableBag](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableBag.html)   [removeAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableSortedBag.html#removeAll-java.util.Collection-) - Method in class org.apache.commons.collections4.bag.[UnmodifiableSortedBag](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableSortedBag.html)   [removeAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.View.html#removeAll-java.util.Collection-) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.View](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.View.html)   [removeAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/collection/AbstractCollectionDecorator.html#removeAll-java.util.Collection-) - Method in class org.apache.commons.collections4.collection.[AbstractCollectionDecorator](http://docs.google.com/org/apache/commons/collections4/collection/AbstractCollectionDecorator.html)   [removeAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html#removeAll-java.util.Collection-) - Method in class org.apache.commons.collections4.collection.[CompositeCollection](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html)

Removes the elements in the specified collection from this composite collection.

[removeAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/collection/IndexedCollection.html#removeAll-java.util.Collection-) - Method in class org.apache.commons.collections4.collection.[IndexedCollection](http://docs.google.com/org/apache/commons/collections4/collection/IndexedCollection.html)   [removeAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/collection/SynchronizedCollection.html#removeAll-java.util.Collection-) - Method in class org.apache.commons.collections4.collection.[SynchronizedCollection](http://docs.google.com/org/apache/commons/collections4/collection/SynchronizedCollection.html)   [removeAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableBoundedCollection.html#removeAll-java.util.Collection-) - Method in class org.apache.commons.collections4.collection.[UnmodifiableBoundedCollection](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableBoundedCollection.html)   [removeAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableCollection.html#removeAll-java.util.Collection-) - Method in class org.apache.commons.collections4.collection.[UnmodifiableCollection](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableCollection.html)   [removeAll(Collection<E>, Collection<?>)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#removeAll-java.util.Collection-java.util.Collection-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Removes the elements in remove from collection.

[removeAll(Iterable<E>, Iterable<? extends E>, Equator<? super E>)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#removeAll-java.lang.Iterable-java.lang.Iterable-org.apache.commons.collections4.Equator-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Removes all elements in remove from collection.

[removeAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#removeAll-java.util.Collection-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html) [removeAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/list/FixedSizeList.html#removeAll-java.util.Collection-) - Method in class org.apache.commons.collections4.list.[FixedSizeList](http://docs.google.com/org/apache/commons/collections4/list/FixedSizeList.html)   [removeAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/list/SetUniqueList.html#removeAll-java.util.Collection-) - Method in class org.apache.commons.collections4.list.[SetUniqueList](http://docs.google.com/org/apache/commons/collections4/list/SetUniqueList.html)   [removeAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/list/UnmodifiableList.html#removeAll-java.util.Collection-) - Method in class org.apache.commons.collections4.list.[UnmodifiableList](http://docs.google.com/org/apache/commons/collections4/list/UnmodifiableList.html)   [removeAll(Collection<E>, Collection<?>)](http://docs.google.com/org/apache/commons/collections4/ListUtils.html#removeAll-java.util.Collection-java.util.Collection-) - Static method in class org.apache.commons.collections4.[ListUtils](http://docs.google.com/org/apache/commons/collections4/ListUtils.html)

Removes the elements in remove from collection.

[removeAll(Object)](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html#removeAll-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[MultiKeyMap](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html)

Removes all mappings where the first key is that specified.

[removeAll(Object, Object)](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html#removeAll-java.lang.Object-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[MultiKeyMap](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html)

Removes all mappings where the first two keys are those specified.

[removeAll(Object, Object, Object)](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html#removeAll-java.lang.Object-java.lang.Object-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[MultiKeyMap](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html)

Removes all mappings where the first three keys are those specified.

[removeAll(Object, Object, Object, Object)](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html#removeAll-java.lang.Object-java.lang.Object-java.lang.Object-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[MultiKeyMap](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html)

Removes all mappings where the first four keys are those specified.

[removeAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableEntrySet.html#removeAll-java.util.Collection-) - Method in class org.apache.commons.collections4.map.[UnmodifiableEntrySet](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableEntrySet.html)   [removeAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html#removeAll-java.util.Collection-) - Method in class org.apache.commons.collections4.multiset.[AbstractMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html)   [removeAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/MultiSet.html#removeAll-java.util.Collection-) - Method in interface org.apache.commons.collections4.[MultiSet](http://docs.google.com/org/apache/commons/collections4/MultiSet.html)

Remove all occurrences of all elements from this MultiSet represented in the given collection.

[removeAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/multiset/UnmodifiableMultiSet.html#removeAll-java.util.Collection-) - Method in class org.apache.commons.collections4.multiset.[UnmodifiableMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/UnmodifiableMultiSet.html)   [removeAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/queue/UnmodifiableQueue.html#removeAll-java.util.Collection-) - Method in class org.apache.commons.collections4.queue.[UnmodifiableQueue](http://docs.google.com/org/apache/commons/collections4/queue/UnmodifiableQueue.html)   [removeAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html#removeAll-java.util.Collection-) - Method in class org.apache.commons.collections4.set.[CompositeSet](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html)

Removes the elements in the specified collection from this composite set.

[removeAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html#removeAll-java.util.Collection-) - Method in class org.apache.commons.collections4.set.[ListOrderedSet](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html)   [removeAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/set/MapBackedSet.html#removeAll-java.util.Collection-) - Method in class org.apache.commons.collections4.set.[MapBackedSet](http://docs.google.com/org/apache/commons/collections4/set/MapBackedSet.html)   [removeAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableNavigableSet.html#removeAll-java.util.Collection-) - Method in class org.apache.commons.collections4.set.[UnmodifiableNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableNavigableSet.html)   [removeAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableSet.html#removeAll-java.util.Collection-) - Method in class org.apache.commons.collections4.set.[UnmodifiableSet](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableSet.html)   [removeAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableSortedSet.html#removeAll-java.util.Collection-) - Method in class org.apache.commons.collections4.set.[UnmodifiableSortedSet](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableSortedSet.html)   [removeAllNodes()](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#removeAllNodes--) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)

Removes all nodes by resetting the circular list marker.

[removeAllNodes()](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.html#removeAllNodes--) - Method in class org.apache.commons.collections4.list.[CursorableLinkedList](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.html)

Removes all nodes by iteration.

[removeAllNodes()](http://docs.google.com/org/apache/commons/collections4/list/NodeCachingLinkedList.html#removeAllNodes--) - Method in class org.apache.commons.collections4.list.[NodeCachingLinkedList](http://docs.google.com/org/apache/commons/collections4/list/NodeCachingLinkedList.html)

Removes all the nodes from the list, storing as many as required in the cache for reuse.

[removeComposited(Collection<E>)](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html#removeComposited-java.util.Collection-) - Method in class org.apache.commons.collections4.collection.[CompositeCollection](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html)

Removes a collection from the those being decorated in this composite.

[removeComposited(Map<K, V>)](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html#removeComposited-java.util.Map-) - Method in class org.apache.commons.collections4.map.[CompositeMap](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html)

Remove a Map from the composite.

[removeComposited(Set<E>)](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html#removeComposited-java.util.Set-) - Method in class org.apache.commons.collections4.set.[CompositeSet](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html)

Removes a set from those being decorated in this composite.

[removeEntry(AbstractHashedMap.HashEntry<K, V>, int, AbstractHashedMap.HashEntry<K, V>)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#removeEntry-org.apache.commons.collections4.map.AbstractHashedMap.HashEntry-int-org.apache.commons.collections4.map.AbstractHashedMap.HashEntry-) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Removes an entry from the chain stored in a particular index.

[removeEntry(AbstractHashedMap.HashEntry<K, V>, int, AbstractHashedMap.HashEntry<K, V>)](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html#removeEntry-org.apache.commons.collections4.map.AbstractHashedMap.HashEntry-int-org.apache.commons.collections4.map.AbstractHashedMap.HashEntry-) - Method in class org.apache.commons.collections4.map.[AbstractLinkedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.html)

Removes an entry from the map and the linked list.

[removeFirst()](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#removeFirst--) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)   [removeIf(Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableBag.html#removeIf-java.util.function.Predicate-) - Method in class org.apache.commons.collections4.bag.[UnmodifiableBag](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableBag.html)   [removeIf(Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableSortedBag.html#removeIf-java.util.function.Predicate-) - Method in class org.apache.commons.collections4.bag.[UnmodifiableSortedBag](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableSortedBag.html)   [removeIf(Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.View.html#removeIf-java.util.function.Predicate-) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.View](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.View.html)   [removeIf(Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/collection/AbstractCollectionDecorator.html#removeIf-java.util.function.Predicate-) - Method in class org.apache.commons.collections4.collection.[AbstractCollectionDecorator](http://docs.google.com/org/apache/commons/collections4/collection/AbstractCollectionDecorator.html)   [removeIf(Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html#removeIf-java.util.function.Predicate-) - Method in class org.apache.commons.collections4.collection.[CompositeCollection](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html)

Removes all of the elements of this collection that satisfy the given predicate from this composite collection.

[removeIf(Predicate<? super C>)](http://docs.google.com/org/apache/commons/collections4/collection/IndexedCollection.html#removeIf-java.util.function.Predicate-) - Method in class org.apache.commons.collections4.collection.[IndexedCollection](http://docs.google.com/org/apache/commons/collections4/collection/IndexedCollection.html)   [removeIf(Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/collection/SynchronizedCollection.html#removeIf-java.util.function.Predicate-) - Method in class org.apache.commons.collections4.collection.[SynchronizedCollection](http://docs.google.com/org/apache/commons/collections4/collection/SynchronizedCollection.html)   [removeIf(Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableBoundedCollection.html#removeIf-java.util.function.Predicate-) - Method in class org.apache.commons.collections4.collection.[UnmodifiableBoundedCollection](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableBoundedCollection.html)   [removeIf(Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableCollection.html#removeIf-java.util.function.Predicate-) - Method in class org.apache.commons.collections4.collection.[UnmodifiableCollection](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableCollection.html)   [removeIf(Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/list/FixedSizeList.html#removeIf-java.util.function.Predicate-) - Method in class org.apache.commons.collections4.list.[FixedSizeList](http://docs.google.com/org/apache/commons/collections4/list/FixedSizeList.html)   [removeIf(Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/list/SetUniqueList.html#removeIf-java.util.function.Predicate-) - Method in class org.apache.commons.collections4.list.[SetUniqueList](http://docs.google.com/org/apache/commons/collections4/list/SetUniqueList.html)   [removeIf(Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/list/UnmodifiableList.html#removeIf-java.util.function.Predicate-) - Method in class org.apache.commons.collections4.list.[UnmodifiableList](http://docs.google.com/org/apache/commons/collections4/list/UnmodifiableList.html)   [removeIf(Predicate<? super Map.Entry<K, V>>)](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableEntrySet.html#removeIf-java.util.function.Predicate-) - Method in class org.apache.commons.collections4.map.[UnmodifiableEntrySet](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableEntrySet.html)   [removeIf(Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/multiset/UnmodifiableMultiSet.html#removeIf-java.util.function.Predicate-) - Method in class org.apache.commons.collections4.multiset.[UnmodifiableMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/UnmodifiableMultiSet.html)   [removeIf(Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/queue/UnmodifiableQueue.html#removeIf-java.util.function.Predicate-) - Method in class org.apache.commons.collections4.queue.[UnmodifiableQueue](http://docs.google.com/org/apache/commons/collections4/queue/UnmodifiableQueue.html)   [removeIf(Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html#removeIf-java.util.function.Predicate-) - Method in class org.apache.commons.collections4.set.[CompositeSet](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html)   [removeIf(Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html#removeIf-java.util.function.Predicate-) - Method in class org.apache.commons.collections4.set.[ListOrderedSet](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html)   [removeIf(Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/set/MapBackedSet.html#removeIf-java.util.function.Predicate-) - Method in class org.apache.commons.collections4.set.[MapBackedSet](http://docs.google.com/org/apache/commons/collections4/set/MapBackedSet.html)   [removeIf(Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableNavigableSet.html#removeIf-java.util.function.Predicate-) - Method in class org.apache.commons.collections4.set.[UnmodifiableNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableNavigableSet.html)   [removeIf(Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableSet.html#removeIf-java.util.function.Predicate-) - Method in class org.apache.commons.collections4.set.[UnmodifiableSet](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableSet.html)   [removeIf(Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableSortedSet.html#removeIf-java.util.function.Predicate-) - Method in class org.apache.commons.collections4.set.[UnmodifiableSortedSet](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableSortedSet.html)   [removeLast()](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#removeLast--) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)   [removeLRU(AbstractLinkedMap.LinkEntry<K, V>)](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html#removeLRU-org.apache.commons.collections4.map.AbstractLinkedMap.LinkEntry-) - Method in class org.apache.commons.collections4.map.[LRUMap](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html)

Subclass method to control removal of the least recently used entry from the map.

[removeMapping(AbstractHashedMap.HashEntry<K, V>, int, AbstractHashedMap.HashEntry<K, V>)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#removeMapping-org.apache.commons.collections4.map.AbstractHashedMap.HashEntry-int-org.apache.commons.collections4.map.AbstractHashedMap.HashEntry-) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Removes a mapping from the map.

[removeMapping(Object, Object)](http://docs.google.com/org/apache/commons/collections4/map/MultiValueMap.html#removeMapping-java.lang.Object-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[MultiValueMap](http://docs.google.com/org/apache/commons/collections4/map/MultiValueMap.html)

Deprecated.

Removes a specific value from map.

[removeMapping(Object, Object)](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html#removeMapping-java.lang.Object-java.lang.Object-) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html)

Removes a specific key/value mapping from the multi-valued map.

[removeMapping(Object, Object)](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html#removeMapping-java.lang.Object-java.lang.Object-) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMapDecorator](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html)   [removeMapping(K, V)](http://docs.google.com/org/apache/commons/collections4/MultiMap.html#removeMapping-K-V-) - Method in interface org.apache.commons.collections4.[MultiMap](http://docs.google.com/org/apache/commons/collections4/MultiMap.html)

Deprecated.

Removes a specific value from map.

[removeMapping(Object, Object)](http://docs.google.com/org/apache/commons/collections4/multimap/UnmodifiableMultiValuedMap.html#removeMapping-java.lang.Object-java.lang.Object-) - Method in class org.apache.commons.collections4.multimap.[UnmodifiableMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/UnmodifiableMultiValuedMap.html)   [removeMapping(Object, Object)](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html#removeMapping-java.lang.Object-java.lang.Object-) - Method in interface org.apache.commons.collections4.[MultiValuedMap](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html)

Removes a key-value mapping from the map.

[removeMultiKey(Object, Object)](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html#removeMultiKey-java.lang.Object-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[MultiKeyMap](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html)

Removes the specified multi-key from this map.

[removeMultiKey(Object, Object, Object)](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html#removeMultiKey-java.lang.Object-java.lang.Object-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[MultiKeyMap](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html)

Removes the specified multi-key from this map.

[removeMultiKey(Object, Object, Object, Object)](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html#removeMultiKey-java.lang.Object-java.lang.Object-java.lang.Object-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[MultiKeyMap](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html)

Removes the specified multi-key from this map.

[removeMultiKey(Object, Object, Object, Object, Object)](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html#removeMultiKey-java.lang.Object-java.lang.Object-java.lang.Object-java.lang.Object-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[MultiKeyMap](http://docs.google.com/org/apache/commons/collections4/map/MultiKeyMap.html)

Removes the specified multi-key from this map.

[removeNode(AbstractLinkedList.Node<E>)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#removeNode-org.apache.commons.collections4.list.AbstractLinkedList.Node-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)

Removes the specified node from the list.

[removeNode(AbstractLinkedList.Node<E>)](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.html#removeNode-org.apache.commons.collections4.list.AbstractLinkedList.Node-) - Method in class org.apache.commons.collections4.list.[CursorableLinkedList](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.html)

Removes the specified node from the list.

[removeNode(AbstractLinkedList.Node<E>)](http://docs.google.com/org/apache/commons/collections4/list/NodeCachingLinkedList.html#removeNode-org.apache.commons.collections4.list.AbstractLinkedList.Node-) - Method in class org.apache.commons.collections4.list.[NodeCachingLinkedList](http://docs.google.com/org/apache/commons/collections4/list/NodeCachingLinkedList.html)

Removes the node from the list, storing it in the cache for reuse if the cache is not yet full.

[removeValue(Object)](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractBidiMapDecorator.html#removeValue-java.lang.Object-) - Method in class org.apache.commons.collections4.bidimap.[AbstractBidiMapDecorator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractBidiMapDecorator.html)   [removeValue(Object)](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html#removeValue-java.lang.Object-) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html)   [removeValue(Object)](http://docs.google.com/org/apache/commons/collections4/BidiMap.html#removeValue-java.lang.Object-) - Method in interface org.apache.commons.collections4.[BidiMap](http://docs.google.com/org/apache/commons/collections4/BidiMap.html)

Removes the key-value pair that is currently mapped to the specified value (optional operation).

[removeValue(Object)](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html#removeValue-java.lang.Object-) - Method in class org.apache.commons.collections4.bidimap.[TreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html)

Removes the mapping for this value from this map if present.

[removeValue(Object)](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableBidiMap.html#removeValue-java.lang.Object-) - Method in class org.apache.commons.collections4.bidimap.[UnmodifiableBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableBidiMap.html)   [removeValue(Object)](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableOrderedBidiMap.html#removeValue-java.lang.Object-) - Method in class org.apache.commons.collections4.bidimap.[UnmodifiableOrderedBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableOrderedBidiMap.html)   [removeValue(Object)](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableSortedBidiMap.html#removeValue-java.lang.Object-) - Method in class org.apache.commons.collections4.bidimap.[UnmodifiableSortedBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableSortedBidiMap.html)   [ReplacementsFinder](http://docs.google.com/org/apache/commons/collections4/sequence/ReplacementsFinder.html)<[T](http://docs.google.com/org/apache/commons/collections4/sequence/ReplacementsFinder.html)> - Class in [org.apache.commons.collections4.sequence](http://docs.google.com/org/apache/commons/collections4/sequence/package-summary.html)

This class handles sequences of replacements resulting from a comparison.

[ReplacementsFinder(ReplacementsHandler<T>)](http://docs.google.com/org/apache/commons/collections4/sequence/ReplacementsFinder.html#ReplacementsFinder-org.apache.commons.collections4.sequence.ReplacementsHandler-) - Constructor for class org.apache.commons.collections4.sequence.[ReplacementsFinder](http://docs.google.com/org/apache/commons/collections4/sequence/ReplacementsFinder.html)

Simple constructor.

[ReplacementsHandler](http://docs.google.com/org/apache/commons/collections4/sequence/ReplacementsHandler.html)<[T](http://docs.google.com/org/apache/commons/collections4/sequence/ReplacementsHandler.html)> - Interface in [org.apache.commons.collections4.sequence](http://docs.google.com/org/apache/commons/collections4/sequence/package-summary.html)

This interface is devoted to handle synchronized replacement sequences.

[reset()](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.BidiMapIterator.html#reset--) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.BidiMapIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.BidiMapIterator.html)   [reset()](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.BidiOrderedMapIterator.html#reset--) - Method in class org.apache.commons.collections4.bidimap.[DualTreeBidiMap.BidiOrderedMapIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.BidiOrderedMapIterator.html)   [reset()](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayIterator.html#reset--) - Method in class org.apache.commons.collections4.iterators.[ArrayIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayIterator.html)

Resets the iterator back to the start index.

[reset()](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayListIterator.html#reset--) - Method in class org.apache.commons.collections4.iterators.[ArrayListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayListIterator.html)

Resets the iterator back to the start index.

[reset()](http://docs.google.com/org/apache/commons/collections4/iterators/EntrySetMapIterator.html#reset--) - Method in class org.apache.commons.collections4.iterators.[EntrySetMapIterator](http://docs.google.com/org/apache/commons/collections4/iterators/EntrySetMapIterator.html)

Resets the state of the iterator.

[reset()](http://docs.google.com/org/apache/commons/collections4/iterators/ListIteratorWrapper.html#reset--) - Method in class org.apache.commons.collections4.iterators.[ListIteratorWrapper](http://docs.google.com/org/apache/commons/collections4/iterators/ListIteratorWrapper.html)

Resets this iterator back to the position at which the iterator was created.

[reset()](http://docs.google.com/org/apache/commons/collections4/iterators/LoopingIterator.html#reset--) - Method in class org.apache.commons.collections4.iterators.[LoopingIterator](http://docs.google.com/org/apache/commons/collections4/iterators/LoopingIterator.html)

Resets the iterator back to the start of the collection.

[reset()](http://docs.google.com/org/apache/commons/collections4/iterators/LoopingListIterator.html#reset--) - Method in class org.apache.commons.collections4.iterators.[LoopingListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/LoopingListIterator.html)

Resets the iterator back to the start of the list.

[reset()](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayIterator.html#reset--) - Method in class org.apache.commons.collections4.iterators.[ObjectArrayIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayIterator.html)

Resets the iterator back to the start index.

[reset()](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayListIterator.html#reset--) - Method in class org.apache.commons.collections4.iterators.[ObjectArrayListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayListIterator.html)

Resets the iterator back to the start index.

[reset()](http://docs.google.com/org/apache/commons/collections4/iterators/ReverseListIterator.html#reset--) - Method in class org.apache.commons.collections4.iterators.[ReverseListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ReverseListIterator.html)

Resets the iterator back to the start (which is the end of the list as this is a reversed iterator)

[reset()](http://docs.google.com/org/apache/commons/collections4/iterators/SingletonIterator.html#reset--) - Method in class org.apache.commons.collections4.iterators.[SingletonIterator](http://docs.google.com/org/apache/commons/collections4/iterators/SingletonIterator.html)

Reset the iterator to the start.

[reset()](http://docs.google.com/org/apache/commons/collections4/iterators/SingletonListIterator.html#reset--) - Method in class org.apache.commons.collections4.iterators.[SingletonListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/SingletonListIterator.html)

Reset the iterator back to the start.

[reset()](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkIterator.html#reset--) - Method in class org.apache.commons.collections4.map.[AbstractLinkedMap.LinkIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkIterator.html)   [reset()](http://docs.google.com/org/apache/commons/collections4/map/AbstractSortedMapDecorator.SortedMapIterator.html#reset--) - Method in class org.apache.commons.collections4.map.[AbstractSortedMapDecorator.SortedMapIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractSortedMapDecorator.SortedMapIterator.html)

Resets the iterator back to the position at which the iterator was created.

[reset()](http://docs.google.com/org/apache/commons/collections4/map/EntrySetToMapIteratorAdapter.html#reset--) - Method in class org.apache.commons.collections4.map.[EntrySetToMapIteratorAdapter](http://docs.google.com/org/apache/commons/collections4/map/EntrySetToMapIteratorAdapter.html)

Resets the iterator back to the position at which the iterator was created.

[reset()](http://docs.google.com/org/apache/commons/collections4/ResettableIterator.html#reset--) - Method in interface org.apache.commons.collections4.[ResettableIterator](http://docs.google.com/org/apache/commons/collections4/ResettableIterator.html)

Resets the iterator back to the position at which the iterator was created.

[RESETTABLE\_INSTANCE](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyIterator.html#RESETTABLE_INSTANCE) - Static variable in class org.apache.commons.collections4.iterators.[EmptyIterator](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyIterator.html)

Singleton instance of the iterator.

[RESETTABLE\_INSTANCE](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyListIterator.html#RESETTABLE_INSTANCE) - Static variable in class org.apache.commons.collections4.iterators.[EmptyListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyListIterator.html)

Singleton instance of the iterator.

[resettableEmptyIterator()](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyIterator.html#resettableEmptyIterator--) - Static method in class org.apache.commons.collections4.iterators.[EmptyIterator](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyIterator.html)

Get a typed resettable empty iterator instance.

[resettableEmptyListIterator()](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyListIterator.html#resettableEmptyListIterator--) - Static method in class org.apache.commons.collections4.iterators.[EmptyListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/EmptyListIterator.html)

Get a typed instance of the iterator.

[ResettableIterator](http://docs.google.com/org/apache/commons/collections4/ResettableIterator.html)<[E](http://docs.google.com/org/apache/commons/collections4/ResettableIterator.html)> - Interface in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

Defines an iterator that can be reset back to an initial state.

[ResettableListIterator](http://docs.google.com/org/apache/commons/collections4/ResettableListIterator.html)<[E](http://docs.google.com/org/apache/commons/collections4/ResettableListIterator.html)> - Interface in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

Defines a list iterator that can be reset back to an initial state.

[resolve(int)](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceStrength.html#resolve-int-) - Static method in enum org.apache.commons.collections4.map.[AbstractReferenceMap.ReferenceStrength](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceStrength.html)

Resolve enum from int.

[resolveCollision(CompositeMap<K, V>, Map<K, V>, Map<K, V>, Collection<K>)](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.MapMutator.html#resolveCollision-org.apache.commons.collections4.map.CompositeMap-java.util.Map-java.util.Map-java.util.Collection-) - Method in interface org.apache.commons.collections4.map.[CompositeMap.MapMutator](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.MapMutator.html)

Called when adding a new Composited Map results in a key collision.

[resolveCollision(CompositeSet<E>, Set<E>, Set<E>, Collection<E>)](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.SetMutator.html#resolveCollision-org.apache.commons.collections4.set.CompositeSet-java.util.Set-java.util.Set-java.util.Collection-) - Method in interface org.apache.commons.collections4.set.[CompositeSet.SetMutator](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.SetMutator.html)

Called when a Set is added to the CompositeSet and there is a collision between existing and added sets.

[retainAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html#retainAll-java.util.Collection-) - Method in class org.apache.commons.collections4.bag.[AbstractMapBag](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html)

Remove any members of the bag that are not in the given bag, respecting cardinality.

[retainAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/bag/CollectionBag.html#retainAll-java.util.Collection-) - Method in class org.apache.commons.collections4.bag.[CollectionBag](http://docs.google.com/org/apache/commons/collections4/bag/CollectionBag.html)

*(Change)* Remove any members of the bag that are not in the given collection, *not* respecting cardinality.

[retainAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/bag/CollectionSortedBag.html#retainAll-java.util.Collection-) - Method in class org.apache.commons.collections4.bag.[CollectionSortedBag](http://docs.google.com/org/apache/commons/collections4/bag/CollectionSortedBag.html)   [retainAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/Bag.html#retainAll-java.util.Collection-) - Method in interface org.apache.commons.collections4.[Bag](http://docs.google.com/org/apache/commons/collections4/Bag.html)

*(Violation)* Remove any members of the bag that are not in the given collection, respecting cardinality.

[retainAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableBag.html#retainAll-java.util.Collection-) - Method in class org.apache.commons.collections4.bag.[UnmodifiableBag](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableBag.html)   [retainAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableSortedBag.html#retainAll-java.util.Collection-) - Method in class org.apache.commons.collections4.bag.[UnmodifiableSortedBag](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableSortedBag.html)   [retainAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.View.html#retainAll-java.util.Collection-) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.View](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.View.html) [retainAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/collection/AbstractCollectionDecorator.html#retainAll-java.util.Collection-) - Method in class org.apache.commons.collections4.collection.[AbstractCollectionDecorator](http://docs.google.com/org/apache/commons/collections4/collection/AbstractCollectionDecorator.html)   [retainAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html#retainAll-java.util.Collection-) - Method in class org.apache.commons.collections4.collection.[CompositeCollection](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html)

Retains all the elements in the specified collection in this composite collection, removing all others.

[retainAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/collection/IndexedCollection.html#retainAll-java.util.Collection-) - Method in class org.apache.commons.collections4.collection.[IndexedCollection](http://docs.google.com/org/apache/commons/collections4/collection/IndexedCollection.html)   [retainAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/collection/SynchronizedCollection.html#retainAll-java.util.Collection-) - Method in class org.apache.commons.collections4.collection.[SynchronizedCollection](http://docs.google.com/org/apache/commons/collections4/collection/SynchronizedCollection.html)   [retainAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableBoundedCollection.html#retainAll-java.util.Collection-) - Method in class org.apache.commons.collections4.collection.[UnmodifiableBoundedCollection](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableBoundedCollection.html)   [retainAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableCollection.html#retainAll-java.util.Collection-) - Method in class org.apache.commons.collections4.collection.[UnmodifiableCollection](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableCollection.html)   [retainAll(Collection<C>, Collection<?>)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#retainAll-java.util.Collection-java.util.Collection-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Returns a collection containing all the elements in collection that are also in retain.

[retainAll(Iterable<E>, Iterable<? extends E>, Equator<? super E>)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#retainAll-java.lang.Iterable-java.lang.Iterable-org.apache.commons.collections4.Equator-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Returns a collection containing all the elements in collection that are also in retain.

[retainAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#retainAll-java.util.Collection-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html) [retainAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/list/FixedSizeList.html#retainAll-java.util.Collection-) - Method in class org.apache.commons.collections4.list.[FixedSizeList](http://docs.google.com/org/apache/commons/collections4/list/FixedSizeList.html)   [retainAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/list/SetUniqueList.html#retainAll-java.util.Collection-) - Method in class org.apache.commons.collections4.list.[SetUniqueList](http://docs.google.com/org/apache/commons/collections4/list/SetUniqueList.html) [retainAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/list/UnmodifiableList.html#retainAll-java.util.Collection-) - Method in class org.apache.commons.collections4.list.[UnmodifiableList](http://docs.google.com/org/apache/commons/collections4/list/UnmodifiableList.html)   [retainAll(Collection<E>, Collection<?>)](http://docs.google.com/org/apache/commons/collections4/ListUtils.html#retainAll-java.util.Collection-java.util.Collection-) - Static method in class org.apache.commons.collections4.[ListUtils](http://docs.google.com/org/apache/commons/collections4/ListUtils.html)

Returns a List containing all the elements in collection that are also in retain.

[retainAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableEntrySet.html#retainAll-java.util.Collection-) - Method in class org.apache.commons.collections4.map.[UnmodifiableEntrySet](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableEntrySet.html)   [retainAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/MultiSet.html#retainAll-java.util.Collection-) - Method in interface org.apache.commons.collections4.[MultiSet](http://docs.google.com/org/apache/commons/collections4/MultiSet.html)

Remove any elements of this MultiSet that are not contained in the given collection.

[retainAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/multiset/UnmodifiableMultiSet.html#retainAll-java.util.Collection-) - Method in class org.apache.commons.collections4.multiset.[UnmodifiableMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/UnmodifiableMultiSet.html)   [retainAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/queue/UnmodifiableQueue.html#retainAll-java.util.Collection-) - Method in class org.apache.commons.collections4.queue.[UnmodifiableQueue](http://docs.google.com/org/apache/commons/collections4/queue/UnmodifiableQueue.html)   [retainAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html#retainAll-java.util.Collection-) - Method in class org.apache.commons.collections4.set.[CompositeSet](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html)

Retains all the elements in the specified collection in this composite set, removing all others.

[retainAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html#retainAll-java.util.Collection-) - Method in class org.apache.commons.collections4.set.[ListOrderedSet](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html) [retainAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/set/MapBackedSet.html#retainAll-java.util.Collection-) - Method in class org.apache.commons.collections4.set.[MapBackedSet](http://docs.google.com/org/apache/commons/collections4/set/MapBackedSet.html)   [retainAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableNavigableSet.html#retainAll-java.util.Collection-) - Method in class org.apache.commons.collections4.set.[UnmodifiableNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableNavigableSet.html)   [retainAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableSet.html#retainAll-java.util.Collection-) - Method in class org.apache.commons.collections4.set.[UnmodifiableSet](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableSet.html)   [retainAll(Collection<?>)](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableSortedSet.html#retainAll-java.util.Collection-) - Method in class org.apache.commons.collections4.set.[UnmodifiableSortedSet](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableSortedSet.html)   [reuseEntry(AbstractHashedMap.HashEntry<K, V>, int, int, K, V)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#reuseEntry-org.apache.commons.collections4.map.AbstractHashedMap.HashEntry-int-int-K-V-) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Reuses an existing key-value mapping, storing completely new data.

[reuseMapping(AbstractLinkedMap.LinkEntry<K, V>, int, int, K, V)](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html#reuseMapping-org.apache.commons.collections4.map.AbstractLinkedMap.LinkEntry-int-int-K-V-) - Method in class org.apache.commons.collections4.map.[LRUMap](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html)

Reuses an entry by removing it and moving it to a new place in the map.

[reverse()](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html#reverse--) - Method in class org.apache.commons.collections4.[FluentIterable](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html)

Returns a new FluentIterable whose iterator will traverse the elements from this iterable in reverse order.

[reverseArray(Object[])](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#reverseArray-java.lang.Object:A-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Reverses the order of the given array.

[ReverseComparator](http://docs.google.com/org/apache/commons/collections4/comparators/ReverseComparator.html)<[E](http://docs.google.com/org/apache/commons/collections4/comparators/ReverseComparator.html)> - Class in [org.apache.commons.collections4.comparators](http://docs.google.com/org/apache/commons/collections4/comparators/package-summary.html)

Reverses the order of another comparator by reversing the arguments to its [compare](http://docs.google.com/org/apache/commons/collections4/comparators/ReverseComparator.html#compare-E-E-) method.

[ReverseComparator()](http://docs.google.com/org/apache/commons/collections4/comparators/ReverseComparator.html#ReverseComparator--) - Constructor for class org.apache.commons.collections4.comparators.[ReverseComparator](http://docs.google.com/org/apache/commons/collections4/comparators/ReverseComparator.html)

Creates a comparator that compares objects based on the inverse of their natural ordering.

[ReverseComparator(Comparator<? super E>)](http://docs.google.com/org/apache/commons/collections4/comparators/ReverseComparator.html#ReverseComparator-java.util.Comparator-) - Constructor for class org.apache.commons.collections4.comparators.[ReverseComparator](http://docs.google.com/org/apache/commons/collections4/comparators/ReverseComparator.html)

Creates a comparator that inverts the comparison of the given comparator.

[reversedComparator(Comparator<E>)](http://docs.google.com/org/apache/commons/collections4/ComparatorUtils.html#reversedComparator-java.util.Comparator-) - Static method in class org.apache.commons.collections4.[ComparatorUtils](http://docs.google.com/org/apache/commons/collections4/ComparatorUtils.html)

Gets a comparator that reverses the order of the given comparator.

[reversedIterable(Iterable<E>)](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#reversedIterable-java.lang.Iterable-) - Static method in class org.apache.commons.collections4.[IterableUtils](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html)

Returns a reversed view of the given iterable.

[ReverseListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ReverseListIterator.html)<[E](http://docs.google.com/org/apache/commons/collections4/iterators/ReverseListIterator.html)> - Class in [org.apache.commons.collections4.iterators](http://docs.google.com/org/apache/commons/collections4/iterators/package-summary.html)

Iterates backwards through a List, starting with the last element and continuing to the first.

[ReverseListIterator(List<E>)](http://docs.google.com/org/apache/commons/collections4/iterators/ReverseListIterator.html#ReverseListIterator-java.util.List-) - Constructor for class org.apache.commons.collections4.iterators.[ReverseListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ReverseListIterator.html)

Constructor that wraps a list.

## S

[safeAddToMap(Map<? super K, Object>, K, Object)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#safeAddToMap-java.util.Map-K-java.lang.Object-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Protects against adding null values to a map.

[search(Object)](http://docs.google.com/org/apache/commons/collections4/ArrayStack.html#search-java.lang.Object-) - Method in class org.apache.commons.collections4.[ArrayStack](http://docs.google.com/org/apache/commons/collections4/ArrayStack.html)

Deprecated.

Returns the one-based position of the distance from the top that the specified object exists on this stack, where the top-most element is considered to be at distance 1.

[select(Iterable<? extends O>, Predicate<? super O>)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#select-java.lang.Iterable-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Selects all elements from input collection which match the given predicate into an output collection.

[select(Iterable<? extends O>, Predicate<? super O>, R)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#select-java.lang.Iterable-org.apache.commons.collections4.Predicate-R-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Selects all elements from input collection which match the given predicate and adds them to outputCollection.

[select(Iterable<? extends O>, Predicate<? super O>, R, R)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#select-java.lang.Iterable-org.apache.commons.collections4.Predicate-R-R-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Selects all elements from inputCollection into an output and rejected collection, based on the evaluation of the given predicate.

[select(Collection<? extends E>, Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/ListUtils.html#select-java.util.Collection-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[ListUtils](http://docs.google.com/org/apache/commons/collections4/ListUtils.html)

Selects all elements from input collection which match the given predicate into an output list.

[selectRejected(Iterable<? extends O>, Predicate<? super O>)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#selectRejected-java.lang.Iterable-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Selects all elements from inputCollection which don't match the given predicate into an output collection.

[selectRejected(Iterable<? extends O>, Predicate<? super O>, R)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#selectRejected-java.lang.Iterable-org.apache.commons.collections4.Predicate-R-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Selects all elements from inputCollection which don't match the given predicate and adds them to outputCollection.

[selectRejected(Collection<? extends E>, Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/ListUtils.html#selectRejected-java.util.Collection-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[ListUtils](http://docs.google.com/org/apache/commons/collections4/ListUtils.html)

Selects all elements from inputCollection which don't match the given predicate into an output collection.

[SequencesComparator](http://docs.google.com/org/apache/commons/collections4/sequence/SequencesComparator.html)<[T](http://docs.google.com/org/apache/commons/collections4/sequence/SequencesComparator.html)> - Class in [org.apache.commons.collections4.sequence](http://docs.google.com/org/apache/commons/collections4/sequence/package-summary.html)

This class allows to compare two objects sequences.

[SequencesComparator(List<T>, List<T>)](http://docs.google.com/org/apache/commons/collections4/sequence/SequencesComparator.html#SequencesComparator-java.util.List-java.util.List-) - Constructor for class org.apache.commons.collections4.sequence.[SequencesComparator](http://docs.google.com/org/apache/commons/collections4/sequence/SequencesComparator.html)

Simple constructor.

[SequencesComparator(List<T>, List<T>, Equator<? super T>)](http://docs.google.com/org/apache/commons/collections4/sequence/SequencesComparator.html#SequencesComparator-java.util.List-java.util.List-org.apache.commons.collections4.Equator-) - Constructor for class org.apache.commons.collections4.sequence.[SequencesComparator](http://docs.google.com/org/apache/commons/collections4/sequence/SequencesComparator.html)

Simple constructor.

[set(E)](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractListIteratorDecorator.html#set-E-) - Method in class org.apache.commons.collections4.iterators.[AbstractListIteratorDecorator](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractListIteratorDecorator.html) [set(Object)](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayListIterator.html#set-java.lang.Object-) - Method in class org.apache.commons.collections4.iterators.[ArrayListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ArrayListIterator.html)

Sets the element under the cursor.

[set(E)](http://docs.google.com/org/apache/commons/collections4/iterators/FilterListIterator.html#set-E-) - Method in class org.apache.commons.collections4.iterators.[FilterListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/FilterListIterator.html)

Not supported.

[set(E)](http://docs.google.com/org/apache/commons/collections4/iterators/ListIteratorWrapper.html#set-E-) - Method in class org.apache.commons.collections4.iterators.[ListIteratorWrapper](http://docs.google.com/org/apache/commons/collections4/iterators/ListIteratorWrapper.html)

Throws [UnsupportedOperationException](https://docs.oracle.com/javase/7/docs/api/java/lang/UnsupportedOperationException.html?is-external=true) unless the underlying Iterator is a ListIterator.

[set(E)](http://docs.google.com/org/apache/commons/collections4/iterators/LoopingListIterator.html#set-E-) - Method in class org.apache.commons.collections4.iterators.[LoopingListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/LoopingListIterator.html)

Replaces the last element that was returned by [LoopingListIterator.next()](http://docs.google.com/org/apache/commons/collections4/iterators/LoopingListIterator.html#next--) or [LoopingListIterator.previous()](http://docs.google.com/org/apache/commons/collections4/iterators/LoopingListIterator.html#previous--).

[set(E)](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayListIterator.html#set-E-) - Method in class org.apache.commons.collections4.iterators.[ObjectArrayListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectArrayListIterator.html)

Sets the element under the cursor.

[set(E)](http://docs.google.com/org/apache/commons/collections4/iterators/ReverseListIterator.html#set-E-) - Method in class org.apache.commons.collections4.iterators.[ReverseListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ReverseListIterator.html)

Replaces the last returned element.

[set(E)](http://docs.google.com/org/apache/commons/collections4/iterators/SingletonListIterator.html#set-E-) - Method in class org.apache.commons.collections4.iterators.[SingletonListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/SingletonListIterator.html)

Set sets the value of the singleton.

[set(E)](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableListIterator.html#set-E-) - Method in class org.apache.commons.collections4.iterators.[UnmodifiableListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableListIterator.html)   [set(E)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedListIterator.html#set-E-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList.LinkedListIterator](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedListIterator.html)   [set(int, E)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedSubList.html#set-int-E-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList.LinkedSubList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedSubList.html)   [set(int, E)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#set-int-E-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)   [set(int, E)](http://docs.google.com/org/apache/commons/collections4/list/AbstractListDecorator.html#set-int-E-) - Method in class org.apache.commons.collections4.list.[AbstractListDecorator](http://docs.google.com/org/apache/commons/collections4/list/AbstractListDecorator.html)   [set(int, E)](http://docs.google.com/org/apache/commons/collections4/list/FixedSizeList.html#set-int-E-) - Method in class org.apache.commons.collections4.list.[FixedSizeList](http://docs.google.com/org/apache/commons/collections4/list/FixedSizeList.html)   [set(int, E)](http://docs.google.com/org/apache/commons/collections4/list/GrowthList.html#set-int-E-) - Method in class org.apache.commons.collections4.list.[GrowthList](http://docs.google.com/org/apache/commons/collections4/list/GrowthList.html)

Decorate the set method to perform the growth behaviour.

[set(E)](http://docs.google.com/org/apache/commons/collections4/list/PredicatedList.PredicatedListIterator.html#set-E-) - Method in class org.apache.commons.collections4.list.[PredicatedList.PredicatedListIterator](http://docs.google.com/org/apache/commons/collections4/list/PredicatedList.PredicatedListIterator.html)   [set(int, E)](http://docs.google.com/org/apache/commons/collections4/list/PredicatedList.html#set-int-E-) - Method in class org.apache.commons.collections4.list.[PredicatedList](http://docs.google.com/org/apache/commons/collections4/list/PredicatedList.html)   [set(int, E)](http://docs.google.com/org/apache/commons/collections4/list/SetUniqueList.html#set-int-E-) - Method in class org.apache.commons.collections4.list.[SetUniqueList](http://docs.google.com/org/apache/commons/collections4/list/SetUniqueList.html)

Sets the value at the specified index avoiding duplicates.

[set(int, E)](http://docs.google.com/org/apache/commons/collections4/list/TransformedList.html#set-int-E-) - Method in class org.apache.commons.collections4.list.[TransformedList](http://docs.google.com/org/apache/commons/collections4/list/TransformedList.html)   [set(E)](http://docs.google.com/org/apache/commons/collections4/list/TransformedList.TransformedListIterator.html#set-E-) - Method in class org.apache.commons.collections4.list.[TransformedList.TransformedListIterator](http://docs.google.com/org/apache/commons/collections4/list/TransformedList.TransformedListIterator.html)   [set(int, E)](http://docs.google.com/org/apache/commons/collections4/list/TreeList.html#set-int-E-) - Method in class org.apache.commons.collections4.list.[TreeList](http://docs.google.com/org/apache/commons/collections4/list/TreeList.html)

Sets the element at the specified index.

[set(int, E)](http://docs.google.com/org/apache/commons/collections4/list/UnmodifiableList.html#set-int-E-) - Method in class org.apache.commons.collections4.list.[UnmodifiableList](http://docs.google.com/org/apache/commons/collections4/list/UnmodifiableList.html)   [setCollection(Collection<E>)](http://docs.google.com/org/apache/commons/collections4/collection/AbstractCollectionDecorator.html#setCollection-java.util.Collection-) - Method in class org.apache.commons.collections4.collection.[AbstractCollectionDecorator](http://docs.google.com/org/apache/commons/collections4/collection/AbstractCollectionDecorator.html)

Sets the collection being decorated.

[setComparator(int, Comparator<E>)](http://docs.google.com/org/apache/commons/collections4/comparators/ComparatorChain.html#setComparator-int-java.util.Comparator-) - Method in class org.apache.commons.collections4.comparators.[ComparatorChain](http://docs.google.com/org/apache/commons/collections4/comparators/ComparatorChain.html)

Replace the Comparator at the given index, maintaining the existing sort order.

[setComparator(int, Comparator<E>, boolean)](http://docs.google.com/org/apache/commons/collections4/comparators/ComparatorChain.html#setComparator-int-java.util.Comparator-boolean-) - Method in class org.apache.commons.collections4.comparators.[ComparatorChain](http://docs.google.com/org/apache/commons/collections4/comparators/ComparatorChain.html)

Replace the Comparator at the given index in the ComparatorChain, using the given sort order

[setComparator(Comparator<? super E>)](http://docs.google.com/org/apache/commons/collections4/iterators/CollatingIterator.html#setComparator-java.util.Comparator-) - Method in class org.apache.commons.collections4.iterators.[CollatingIterator](http://docs.google.com/org/apache/commons/collections4/iterators/CollatingIterator.html)

Sets the [Comparator](https://docs.oracle.com/javase/7/docs/api/java/util/Comparator.html?is-external=true) by which collation occurs.

[setCount(E, int)](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html#setCount-E-int-) - Method in class org.apache.commons.collections4.multiset.[AbstractMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html)   [setCount(E, int)](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSetDecorator.html#setCount-E-int-) - Method in class org.apache.commons.collections4.multiset.[AbstractMultiSetDecorator](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSetDecorator.html)   [setCount(E, int)](http://docs.google.com/org/apache/commons/collections4/multiset/PredicatedMultiSet.html#setCount-E-int-) - Method in class org.apache.commons.collections4.multiset.[PredicatedMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/PredicatedMultiSet.html)   [setCount(E, int)](http://docs.google.com/org/apache/commons/collections4/MultiSet.html#setCount-E-int-) - Method in interface org.apache.commons.collections4.[MultiSet](http://docs.google.com/org/apache/commons/collections4/MultiSet.html)

Sets the number of occurrences of the specified object in the MultiSet to the given count.

[setCount(E, int)](http://docs.google.com/org/apache/commons/collections4/multiset/SynchronizedMultiSet.html#setCount-E-int-) - Method in class org.apache.commons.collections4.multiset.[SynchronizedMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/SynchronizedMultiSet.html)   [setCount(E, int)](http://docs.google.com/org/apache/commons/collections4/multiset/UnmodifiableMultiSet.html#setCount-E-int-) - Method in class org.apache.commons.collections4.multiset.[UnmodifiableMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/UnmodifiableMultiSet.html)   [setEnumeration(Enumeration<? extends E>)](http://docs.google.com/org/apache/commons/collections4/iterators/EnumerationIterator.html#setEnumeration-java.util.Enumeration-) - Method in class org.apache.commons.collections4.iterators.[EnumerationIterator](http://docs.google.com/org/apache/commons/collections4/iterators/EnumerationIterator.html)

Sets the underlying enumeration.

[setForwardSort(int)](http://docs.google.com/org/apache/commons/collections4/comparators/ComparatorChain.html#setForwardSort-int-) - Method in class org.apache.commons.collections4.comparators.[ComparatorChain](http://docs.google.com/org/apache/commons/collections4/comparators/ComparatorChain.html)

Change the sort order at the given index in the ComparatorChain to a forward sort.

[setIterator(int, Iterator<? extends E>)](http://docs.google.com/org/apache/commons/collections4/iterators/CollatingIterator.html#setIterator-int-java.util.Iterator-) - Method in class org.apache.commons.collections4.iterators.[CollatingIterator](http://docs.google.com/org/apache/commons/collections4/iterators/CollatingIterator.html)

Sets the iterator at the given index.

[setIterator(Iterator<? extends E>)](http://docs.google.com/org/apache/commons/collections4/iterators/FilterIterator.html#setIterator-java.util.Iterator-) - Method in class org.apache.commons.collections4.iterators.[FilterIterator](http://docs.google.com/org/apache/commons/collections4/iterators/FilterIterator.html)

Sets the iterator for this iterator to use.

[setIterator(Iterator<? extends E>)](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorEnumeration.html#setIterator-java.util.Iterator-) - Method in class org.apache.commons.collections4.iterators.[IteratorEnumeration](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorEnumeration.html)

Sets the underlying iterator.

[setIterator(Iterator<? extends I>)](http://docs.google.com/org/apache/commons/collections4/iterators/TransformIterator.html#setIterator-java.util.Iterator-) - Method in class org.apache.commons.collections4.iterators.[TransformIterator](http://docs.google.com/org/apache/commons/collections4/iterators/TransformIterator.html)

Sets the iterator for this iterator to use.

[setKey(K)](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractKeyValue.html#setKey-K-) - Method in class org.apache.commons.collections4.keyvalue.[AbstractKeyValue](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractKeyValue.html)   [setKey(K)](http://docs.google.com/org/apache/commons/collections4/keyvalue/DefaultKeyValue.html#setKey-K-) - Method in class org.apache.commons.collections4.keyvalue.[DefaultKeyValue](http://docs.google.com/org/apache/commons/collections4/keyvalue/DefaultKeyValue.html)

Sets the key.

[setListIterator(ListIterator<? extends E>)](http://docs.google.com/org/apache/commons/collections4/iterators/FilterListIterator.html#setListIterator-java.util.ListIterator-) - Method in class org.apache.commons.collections4.iterators.[FilterListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/FilterListIterator.html)

Sets the iterator for this iterator to use.

[setMap(Map<K, ? extends Collection<V>>)](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html#setMap-java.util.Map-) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html)

Sets the map being wrapped.

[setMap(Map<E, AbstractMapMultiSet.MutableInteger>)](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.html#setMap-java.util.Map-) - Method in class org.apache.commons.collections4.multiset.[AbstractMapMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.html)

Sets the map being wrapped.

[setMaximumCacheSize(int)](http://docs.google.com/org/apache/commons/collections4/list/NodeCachingLinkedList.html#setMaximumCacheSize-int-) - Method in class org.apache.commons.collections4.list.[NodeCachingLinkedList](http://docs.google.com/org/apache/commons/collections4/list/NodeCachingLinkedList.html)

Sets the maximum size of the cache.

[setMutator(CompositeCollection.CollectionMutator<E>)](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html#setMutator-org.apache.commons.collections4.collection.CompositeCollection.CollectionMutator-) - Method in class org.apache.commons.collections4.collection.[CompositeCollection](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html)

Specify a CollectionMutator strategy instance to handle changes.

[setMutator(CompositeMap.MapMutator<K, V>)](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html#setMutator-org.apache.commons.collections4.map.CompositeMap.MapMutator-) - Method in class org.apache.commons.collections4.map.[CompositeMap](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html)

Specify the MapMutator to be used by mutation operations.

[setMutator(CompositeSet.SetMutator<E>)](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html#setMutator-org.apache.commons.collections4.set.CompositeSet.SetMutator-) - Method in class org.apache.commons.collections4.set.[CompositeSet](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html)

Specify a SetMutator strategy instance to handle changes.

[setNextNode(AbstractLinkedList.Node<E>)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.Node.html#setNextNode-org.apache.commons.collections4.list.AbstractLinkedList.Node-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList.Node](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.Node.html)

Sets the next node.

[setPredicate(Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/iterators/FilterIterator.html#setPredicate-org.apache.commons.collections4.Predicate-) - Method in class org.apache.commons.collections4.iterators.[FilterIterator](http://docs.google.com/org/apache/commons/collections4/iterators/FilterIterator.html)

Sets the predicate this the iterator to use.

[setPredicate(Predicate<? super E>)](http://docs.google.com/org/apache/commons/collections4/iterators/FilterListIterator.html#setPredicate-org.apache.commons.collections4.Predicate-) - Method in class org.apache.commons.collections4.iterators.[FilterListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/FilterListIterator.html)

Sets the predicate this the iterator to use.

[setPreviousNode(AbstractLinkedList.Node<E>)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.Node.html#setPreviousNode-org.apache.commons.collections4.list.AbstractLinkedList.Node-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList.Node](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.Node.html)

Sets the previous node.

[setReverseSort(int)](http://docs.google.com/org/apache/commons/collections4/comparators/ComparatorChain.html#setReverseSort-int-) - Method in class org.apache.commons.collections4.comparators.[ComparatorChain](http://docs.google.com/org/apache/commons/collections4/comparators/ComparatorChain.html)

Change the sort order at the given index in the ComparatorChain to a reverse sort.

[setTransformer(Transformer<? super I, ? extends O>)](http://docs.google.com/org/apache/commons/collections4/iterators/TransformIterator.html#setTransformer-org.apache.commons.collections4.Transformer-) - Method in class org.apache.commons.collections4.iterators.[TransformIterator](http://docs.google.com/org/apache/commons/collections4/iterators/TransformIterator.html)

Sets the transformer this the iterator to use.

[SetUniqueList](http://docs.google.com/org/apache/commons/collections4/list/SetUniqueList.html)<[E](http://docs.google.com/org/apache/commons/collections4/list/SetUniqueList.html)> - Class in [org.apache.commons.collections4.list](http://docs.google.com/org/apache/commons/collections4/list/package-summary.html)

Decorates a List to ensure that no duplicates are present much like a Set.

[SetUniqueList(List<E>, Set<E>)](http://docs.google.com/org/apache/commons/collections4/list/SetUniqueList.html#SetUniqueList-java.util.List-java.util.Set-) - Constructor for class org.apache.commons.collections4.list.[SetUniqueList](http://docs.google.com/org/apache/commons/collections4/list/SetUniqueList.html)

Constructor that wraps (not copies) the List and specifies the set to use.

[setUniqueList(List<E>)](http://docs.google.com/org/apache/commons/collections4/list/SetUniqueList.html#setUniqueList-java.util.List-) - Static method in class org.apache.commons.collections4.list.[SetUniqueList](http://docs.google.com/org/apache/commons/collections4/list/SetUniqueList.html)

Factory method to create a SetList using the supplied list to retain order.

[setUnknownObjectBehavior(FixedOrderComparator.UnknownObjectBehavior)](http://docs.google.com/org/apache/commons/collections4/comparators/FixedOrderComparator.html#setUnknownObjectBehavior-org.apache.commons.collections4.comparators.FixedOrderComparator.UnknownObjectBehavior-) - Method in class org.apache.commons.collections4.comparators.[FixedOrderComparator](http://docs.google.com/org/apache/commons/collections4/comparators/FixedOrderComparator.html)

Sets the behavior for comparing unknown objects.

[SetUtils](http://docs.google.com/org/apache/commons/collections4/SetUtils.html) - Class in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

Provides utility methods and decorators for [Set](https://docs.oracle.com/javase/7/docs/api/java/util/Set.html?is-external=true) and [SortedSet](https://docs.oracle.com/javase/7/docs/api/java/util/SortedSet.html?is-external=true) instances.

[SetUtils.SetView](http://docs.google.com/org/apache/commons/collections4/SetUtils.SetView.html)<[E](http://docs.google.com/org/apache/commons/collections4/SetUtils.SetView.html)> - Class in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

An unmodifiable **view** of a set that may be backed by other sets.

[setValue(V)](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.BidiMapIterator.html#setValue-V-) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.BidiMapIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.BidiMapIterator.html)   [setValue(V)](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.MapEntry.html#setValue-V-) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.MapEntry](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.MapEntry.html)   [setValue(V)](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.BidiOrderedMapIterator.html#setValue-V-) - Method in class org.apache.commons.collections4.bidimap.[DualTreeBidiMap.BidiOrderedMapIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.BidiOrderedMapIterator.html)   [setValue(V)](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractEmptyMapIterator.html#setValue-V-) - Method in class org.apache.commons.collections4.iterators.[AbstractEmptyMapIterator](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractEmptyMapIterator.html)   [setValue(V)](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractMapIteratorDecorator.html#setValue-V-) - Method in class org.apache.commons.collections4.iterators.[AbstractMapIteratorDecorator](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractMapIteratorDecorator.html)

Sets the value associated with the current key (optional operation).

[setValue(V)](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractOrderedMapIteratorDecorator.html#setValue-V-) - Method in class org.apache.commons.collections4.iterators.[AbstractOrderedMapIteratorDecorator](http://docs.google.com/org/apache/commons/collections4/iterators/AbstractOrderedMapIteratorDecorator.html)

Sets the value associated with the current key (optional operation).

[setValue(V)](http://docs.google.com/org/apache/commons/collections4/iterators/EntrySetMapIterator.html#setValue-V-) - Method in class org.apache.commons.collections4.iterators.[EntrySetMapIterator](http://docs.google.com/org/apache/commons/collections4/iterators/EntrySetMapIterator.html)

Sets the value associated with the current key.

[setValue(V)](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableMapIterator.html#setValue-V-) - Method in class org.apache.commons.collections4.iterators.[UnmodifiableMapIterator](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableMapIterator.html)   [setValue(V)](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableOrderedMapIterator.html#setValue-V-) - Method in class org.apache.commons.collections4.iterators.[UnmodifiableOrderedMapIterator](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableOrderedMapIterator.html)   [setValue(V)](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractKeyValue.html#setValue-V-) - Method in class org.apache.commons.collections4.keyvalue.[AbstractKeyValue](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractKeyValue.html)   [setValue(V)](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractMapEntry.html#setValue-V-) - Method in class org.apache.commons.collections4.keyvalue.[AbstractMapEntry](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractMapEntry.html)

Sets the value stored in this Map.Entry.

[setValue(V)](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractMapEntryDecorator.html#setValue-V-) - Method in class org.apache.commons.collections4.keyvalue.[AbstractMapEntryDecorator](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractMapEntryDecorator.html)   [setValue(V)](http://docs.google.com/org/apache/commons/collections4/keyvalue/DefaultKeyValue.html#setValue-V-) - Method in class org.apache.commons.collections4.keyvalue.[DefaultKeyValue](http://docs.google.com/org/apache/commons/collections4/keyvalue/DefaultKeyValue.html)

Sets the value.

[setValue(V)](http://docs.google.com/org/apache/commons/collections4/keyvalue/TiedMapEntry.html#setValue-V-) - Method in class org.apache.commons.collections4.keyvalue.[TiedMapEntry](http://docs.google.com/org/apache/commons/collections4/keyvalue/TiedMapEntry.html)

Sets the value associated with the key direct onto the map.

[setValue(V)](http://docs.google.com/org/apache/commons/collections4/keyvalue/UnmodifiableMapEntry.html#setValue-V-) - Method in class org.apache.commons.collections4.keyvalue.[UnmodifiableMapEntry](http://docs.google.com/org/apache/commons/collections4/keyvalue/UnmodifiableMapEntry.html)

Throws UnsupportedOperationException.

[setValue(E)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.Node.html#setValue-E-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList.Node](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.Node.html)

Sets the value of the node.

[setValue(V)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html#setValue-V-) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap.HashEntry](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html)   [setValue(V)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashMapIterator.html#setValue-V-) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap.HashMapIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashMapIterator.html)   [setValue(V)](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkMapIterator.html#setValue-V-) - Method in class org.apache.commons.collections4.map.[AbstractLinkedMap.LinkMapIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkMapIterator.html)   [setValue(V)](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html#setValue-V-) - Method in class org.apache.commons.collections4.map.[AbstractReferenceMap.ReferenceEntry](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html)

Sets the value of the entry.

[setValue(V)](http://docs.google.com/org/apache/commons/collections4/map/EntrySetToMapIteratorAdapter.html#setValue-V-) - Method in class org.apache.commons.collections4.map.[EntrySetToMapIteratorAdapter](http://docs.google.com/org/apache/commons/collections4/map/EntrySetToMapIteratorAdapter.html)

Sets the value associated with the current key (optional operation).

[setValue(int, V)](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html#setValue-int-V-) - Method in class org.apache.commons.collections4.map.[ListOrderedMap](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html)

Sets the value at the specified index.

[setValue(V)](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html#setValue-V-) - Method in class org.apache.commons.collections4.map.[SingletonMap](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html)

Sets the value.

[setValue(V)](http://docs.google.com/org/apache/commons/collections4/MapIterator.html#setValue-V-) - Method in interface org.apache.commons.collections4.[MapIterator](http://docs.google.com/org/apache/commons/collections4/MapIterator.html)

Sets the value associated with the current key (optional operation).

[SETVALUE\_INVALID](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#SETVALUE_INVALID) - Static variable in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)   [SetValuedMap](http://docs.google.com/org/apache/commons/collections4/SetValuedMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/SetValuedMap.html),[V](http://docs.google.com/org/apache/commons/collections4/SetValuedMap.html)> - Interface in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

Defines a map that holds a set of values against each key.

[SetView()](http://docs.google.com/org/apache/commons/collections4/SetUtils.SetView.html#SetView--) - Constructor for class org.apache.commons.collections4.[SetUtils.SetView](http://docs.google.com/org/apache/commons/collections4/SetUtils.SetView.html)   [shrinkCacheToMaximumSize()](http://docs.google.com/org/apache/commons/collections4/list/NodeCachingLinkedList.html#shrinkCacheToMaximumSize--) - Method in class org.apache.commons.collections4.list.[NodeCachingLinkedList](http://docs.google.com/org/apache/commons/collections4/list/NodeCachingLinkedList.html)

Reduce the size of the cache to the maximum, if necessary.

[SingletonIterator](http://docs.google.com/org/apache/commons/collections4/iterators/SingletonIterator.html)<[E](http://docs.google.com/org/apache/commons/collections4/iterators/SingletonIterator.html)> - Class in [org.apache.commons.collections4.iterators](http://docs.google.com/org/apache/commons/collections4/iterators/package-summary.html)

SingletonIterator is an [Iterator](https://docs.oracle.com/javase/7/docs/api/java/util/Iterator.html?is-external=true) over a single object instance.

[SingletonIterator(E)](http://docs.google.com/org/apache/commons/collections4/iterators/SingletonIterator.html#SingletonIterator-E-) - Constructor for class org.apache.commons.collections4.iterators.[SingletonIterator](http://docs.google.com/org/apache/commons/collections4/iterators/SingletonIterator.html)

Constructs a new SingletonIterator where remove is a permitted operation.

[SingletonIterator(E, boolean)](http://docs.google.com/org/apache/commons/collections4/iterators/SingletonIterator.html#SingletonIterator-E-boolean-) - Constructor for class org.apache.commons.collections4.iterators.[SingletonIterator](http://docs.google.com/org/apache/commons/collections4/iterators/SingletonIterator.html)

Constructs a new SingletonIterator optionally choosing if remove is a permitted operation.

[singletonIterator(E)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#singletonIterator-E-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets a singleton iterator.

[SingletonListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/SingletonListIterator.html)<[E](http://docs.google.com/org/apache/commons/collections4/iterators/SingletonListIterator.html)> - Class in [org.apache.commons.collections4.iterators](http://docs.google.com/org/apache/commons/collections4/iterators/package-summary.html)

SingletonIterator is an [ListIterator](https://docs.oracle.com/javase/7/docs/api/java/util/ListIterator.html?is-external=true) over a single object instance.

[SingletonListIterator(E)](http://docs.google.com/org/apache/commons/collections4/iterators/SingletonListIterator.html#SingletonListIterator-E-) - Constructor for class org.apache.commons.collections4.iterators.[SingletonListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/SingletonListIterator.html)

Constructs a new SingletonListIterator.

[singletonListIterator(E)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#singletonListIterator-E-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets a singleton list iterator.

[SingletonMap](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html),[V](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

A Map implementation that holds a single item and is fixed size.

[SingletonMap()](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html#SingletonMap--) - Constructor for class org.apache.commons.collections4.map.[SingletonMap](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html)

Constructor that creates a map of null to null.

[SingletonMap(K, V)](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html#SingletonMap-K-V-) - Constructor for class org.apache.commons.collections4.map.[SingletonMap](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html)

Constructor specifying the key and value.

[SingletonMap(KeyValue<K, V>)](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html#SingletonMap-org.apache.commons.collections4.KeyValue-) - Constructor for class org.apache.commons.collections4.map.[SingletonMap](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html)

Constructor specifying the key and value as a KeyValue.

[SingletonMap(Map.Entry<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html#SingletonMap-java.util.Map.Entry-) - Constructor for class org.apache.commons.collections4.map.[SingletonMap](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html)

Constructor specifying the key and value as a MapEntry.

[SingletonMap(Map<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html#SingletonMap-java.util.Map-) - Constructor for class org.apache.commons.collections4.map.[SingletonMap](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html)

Constructor copying elements from another map.

[size()](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html#size--) - Method in class org.apache.commons.collections4.bag.[AbstractMapBag](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html)

Returns the number of elements in this bag.

[size()](http://docs.google.com/org/apache/commons/collections4/Bag.html#size--) - Method in interface org.apache.commons.collections4.[Bag](http://docs.google.com/org/apache/commons/collections4/Bag.html)

Returns the total number of items in the bag across all types.

[size()](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html#size--) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html)   [size()](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html#size--) - Method in class org.apache.commons.collections4.bidimap.[TreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html)

Returns the number of key-value mappings in this map.

[size()](http://docs.google.com/org/apache/commons/collections4/collection/AbstractCollectionDecorator.html#size--) - Method in class org.apache.commons.collections4.collection.[AbstractCollectionDecorator](http://docs.google.com/org/apache/commons/collections4/collection/AbstractCollectionDecorator.html)   [size()](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html#size--) - Method in class org.apache.commons.collections4.collection.[CompositeCollection](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html)

Gets the size of this composite collection.

[size()](http://docs.google.com/org/apache/commons/collections4/collection/SynchronizedCollection.html#size--) - Method in class org.apache.commons.collections4.collection.[SynchronizedCollection](http://docs.google.com/org/apache/commons/collections4/collection/SynchronizedCollection.html)   [size(Object)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#size-java.lang.Object-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Gets the size of the collection/iterator specified.

[size()](http://docs.google.com/org/apache/commons/collections4/comparators/ComparatorChain.html#size--) - Method in class org.apache.commons.collections4.comparators.[ComparatorChain](http://docs.google.com/org/apache/commons/collections4/comparators/ComparatorChain.html)

Number of Comparators in the current ComparatorChain.

[size()](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html#size--) - Method in class org.apache.commons.collections4.[FluentIterable](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html)

Returns the number of elements that are contained in this iterable.

[size()](http://docs.google.com/org/apache/commons/collections4/Get.html#size--) - Method in interface org.apache.commons.collections4.[Get](http://docs.google.com/org/apache/commons/collections4/Get.html)   [size(Iterable<?>)](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#size-java.lang.Iterable-) - Static method in class org.apache.commons.collections4.[IterableUtils](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html)

Returns the number of elements contained in the given iterator.

[size()](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorChain.html#size--) - Method in class org.apache.commons.collections4.iterators.[IteratorChain](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorChain.html)

Returns the remaining number of Iterators in the current IteratorChain.

[size()](http://docs.google.com/org/apache/commons/collections4/iterators/LoopingIterator.html#size--) - Method in class org.apache.commons.collections4.iterators.[LoopingIterator](http://docs.google.com/org/apache/commons/collections4/iterators/LoopingIterator.html)

Gets the size of the collection underlying the iterator.

[size()](http://docs.google.com/org/apache/commons/collections4/iterators/LoopingListIterator.html#size--) - Method in class org.apache.commons.collections4.iterators.[LoopingListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/LoopingListIterator.html)

Gets the size of the list underlying the iterator.

[size(Iterator<?>)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#size-java.util.Iterator-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Returns the number of elements contained in the given iterator.

[size()](http://docs.google.com/org/apache/commons/collections4/keyvalue/MultiKey.html#size--) - Method in class org.apache.commons.collections4.keyvalue.[MultiKey](http://docs.google.com/org/apache/commons/collections4/keyvalue/MultiKey.html)

Gets the size of the list of keys.

[size()](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedSubList.html#size--) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList.LinkedSubList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedSubList.html)   [size()](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#size--) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)   [size()](http://docs.google.com/org/apache/commons/collections4/list/TreeList.html#size--) - Method in class org.apache.commons.collections4.list.[TreeList](http://docs.google.com/org/apache/commons/collections4/list/TreeList.html)

Gets the current size of the list.

[size()](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.EntrySet.html#size--) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap.EntrySet](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.EntrySet.html)   [size()](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySet.html#size--) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap.KeySet](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.KeySet.html)   [size()](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#size--) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Gets the size of the map.

[size()](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.Values.html#size--) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap.Values](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.Values.html)   [size()](http://docs.google.com/org/apache/commons/collections4/map/AbstractMapDecorator.html#size--) - Method in class org.apache.commons.collections4.map.[AbstractMapDecorator](http://docs.google.com/org/apache/commons/collections4/map/AbstractMapDecorator.html)   [size()](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html#size--) - Method in class org.apache.commons.collections4.map.[AbstractReferenceMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html)

Gets the size of the map.

[size()](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html#size--) - Method in class org.apache.commons.collections4.map.[CompositeMap](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html)

Returns the number of key-value mappings in this map.

[size()](http://docs.google.com/org/apache/commons/collections4/map/Flat3Map.html#size--) - Method in class org.apache.commons.collections4.map.[Flat3Map](http://docs.google.com/org/apache/commons/collections4/map/Flat3Map.html)

Gets the size of the map.

[size(Object)](http://docs.google.com/org/apache/commons/collections4/map/MultiValueMap.html#size-java.lang.Object-) - Method in class org.apache.commons.collections4.map.[MultiValueMap](http://docs.google.com/org/apache/commons/collections4/map/MultiValueMap.html)

Deprecated.

Gets the size of the collection mapped to the specified key.

[size()](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.html#size--) - Method in class org.apache.commons.collections4.map.[PassiveExpiringMap](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.html)

All expired entries are removed from the map prior to returning the size.

[size()](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html#size--) - Method in class org.apache.commons.collections4.map.[SingletonMap](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html)

Gets the size of the map, always 1.

[size()](http://docs.google.com/org/apache/commons/collections4/map/StaticBucketMap.html#size--) - Method in class org.apache.commons.collections4.map.[StaticBucketMap](http://docs.google.com/org/apache/commons/collections4/map/StaticBucketMap.html)

Gets the current size of the map.

[size(Map<?, ?>)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#size-java.util.Map-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Gets the given map size or 0 if the map is null

[size()](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html#size--) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html)

Gets the total size of the map.

[size()](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html#size--) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMapDecorator](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html)   [size()](http://docs.google.com/org/apache/commons/collections4/MultiMap.html#size--) - Method in interface org.apache.commons.collections4.[MultiMap](http://docs.google.com/org/apache/commons/collections4/MultiMap.html)

Deprecated.

Gets the number of keys in this map.

[size()](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.html#size--) - Method in class org.apache.commons.collections4.multiset.[AbstractMapMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.html)

Returns the number of elements in this multiset.

[size()](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.EntrySet.html#size--) - Method in class org.apache.commons.collections4.multiset.[AbstractMultiSet.EntrySet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.EntrySet.html)   [size()](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html#size--) - Method in class org.apache.commons.collections4.multiset.[AbstractMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html)

Returns the number of elements in this multiset.

[size()](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.UniqueSet.html#size--) - Method in class org.apache.commons.collections4.multiset.[AbstractMultiSet.UniqueSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.UniqueSet.html)   [size()](http://docs.google.com/org/apache/commons/collections4/MultiSet.html#size--) - Method in interface org.apache.commons.collections4.[MultiSet](http://docs.google.com/org/apache/commons/collections4/MultiSet.html)

Returns the total number of items in the MultiSet.

[size()](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html#size--) - Method in interface org.apache.commons.collections4.[MultiValuedMap](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html)

Gets the total size of the map.

[size()](http://docs.google.com/org/apache/commons/collections4/queue/CircularFifoQueue.html#size--) - Method in class org.apache.commons.collections4.queue.[CircularFifoQueue](http://docs.google.com/org/apache/commons/collections4/queue/CircularFifoQueue.html)

Returns the number of elements stored in the queue.

[size()](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html#size--) - Method in class org.apache.commons.collections4.set.[CompositeSet](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html)

Gets the size of this composite set.

[size()](http://docs.google.com/org/apache/commons/collections4/set/MapBackedSet.html#size--) - Method in class org.apache.commons.collections4.set.[MapBackedSet](http://docs.google.com/org/apache/commons/collections4/set/MapBackedSet.html)   [size()](http://docs.google.com/org/apache/commons/collections4/SetUtils.SetView.html#size--) - Method in class org.apache.commons.collections4.[SetUtils.SetView](http://docs.google.com/org/apache/commons/collections4/SetUtils.SetView.html)   [size()](http://docs.google.com/org/apache/commons/collections4/splitmap/AbstractIterableGetMapDecorator.html#size--) - Method in class org.apache.commons.collections4.splitmap.[AbstractIterableGetMapDecorator](http://docs.google.com/org/apache/commons/collections4/splitmap/AbstractIterableGetMapDecorator.html)   [size()](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html#size--) - Method in class org.apache.commons.collections4.trie.[UnmodifiableTrie](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html)   [sizeIsEmpty(Object)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#sizeIsEmpty-java.lang.Object-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Checks if the specified collection/array/iterator is empty.

[skip(long)](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html#skip-long-) - Method in class org.apache.commons.collections4.[FluentIterable](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html)

Returns a new FluentIterable whose iterator will skip the first N elements from this iterable.

[skippingIterable(Iterable<E>, long)](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#skippingIterable-java.lang.Iterable-long-) - Static method in class org.apache.commons.collections4.[IterableUtils](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html)

Returns a view of the given iterable that skips the first N elements.

[SkippingIterator](http://docs.google.com/org/apache/commons/collections4/iterators/SkippingIterator.html)<[E](http://docs.google.com/org/apache/commons/collections4/iterators/SkippingIterator.html)> - Class in [org.apache.commons.collections4.iterators](http://docs.google.com/org/apache/commons/collections4/iterators/package-summary.html)

Decorates another iterator to skip the first N elements.

[SkippingIterator(Iterator<E>, long)](http://docs.google.com/org/apache/commons/collections4/iterators/SkippingIterator.html#SkippingIterator-java.util.Iterator-long-) - Constructor for class org.apache.commons.collections4.iterators.[SkippingIterator](http://docs.google.com/org/apache/commons/collections4/iterators/SkippingIterator.html)

Decorates the specified iterator to skip all elements until the iterator reaches the position at offset.

[skippingIterator(Iterator<E>, long)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#skippingIterator-java.util.Iterator-long-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Decorates the specified iterator to skip the first N elements.

[SortedBag](http://docs.google.com/org/apache/commons/collections4/SortedBag.html)<[E](http://docs.google.com/org/apache/commons/collections4/SortedBag.html)> - Interface in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

Defines a type of Bag that maintains a sorted order among its unique representative members.

[SortedBidiMap](http://docs.google.com/org/apache/commons/collections4/SortedBidiMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/SortedBidiMap.html),[V](http://docs.google.com/org/apache/commons/collections4/SortedBidiMap.html)> - Interface in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

Defines a map that allows bidirectional lookup between key and values and retains both keys and values in sorted order.

[SortedMapIterator(Set<Map.Entry<K, V>>)](http://docs.google.com/org/apache/commons/collections4/map/AbstractSortedMapDecorator.SortedMapIterator.html#SortedMapIterator-java.util.Set-) - Constructor for class org.apache.commons.collections4.map.[AbstractSortedMapDecorator.SortedMapIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractSortedMapDecorator.SortedMapIterator.html)

Create a new AbstractSortedMapDecorator.SortedMapIterator.

[SortedProperties](http://docs.google.com/org/apache/commons/collections4/properties/SortedProperties.html) - Class in [org.apache.commons.collections4.properties](http://docs.google.com/org/apache/commons/collections4/properties/package-summary.html)

A drop-in replacement for [Properties](https://docs.oracle.com/javase/7/docs/api/java/util/Properties.html?is-external=true) for sorting keys.

[SortedProperties()](http://docs.google.com/org/apache/commons/collections4/properties/SortedProperties.html#SortedProperties--) - Constructor for class org.apache.commons.collections4.properties.[SortedProperties](http://docs.google.com/org/apache/commons/collections4/properties/SortedProperties.html)   [SortedPropertiesFactory](http://docs.google.com/org/apache/commons/collections4/properties/SortedPropertiesFactory.html) - Class in [org.apache.commons.collections4.properties](http://docs.google.com/org/apache/commons/collections4/properties/package-summary.html)

Creates and loads [SortedProperties](http://docs.google.com/org/apache/commons/collections4/properties/SortedProperties.html).

[sortsTrueFirst()](http://docs.google.com/org/apache/commons/collections4/comparators/BooleanComparator.html#sortsTrueFirst--) - Method in class org.apache.commons.collections4.comparators.[BooleanComparator](http://docs.google.com/org/apache/commons/collections4/comparators/BooleanComparator.html)

Returns true iff I sort true values before false values.

[SplitMapUtils](http://docs.google.com/org/apache/commons/collections4/SplitMapUtils.html) - Class in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

Utilities for working with "split maps:" objects that implement [Put](http://docs.google.com/org/apache/commons/collections4/Put.html) and/or [Get](http://docs.google.com/org/apache/commons/collections4/Get.html) but not [Map](https://docs.oracle.com/javase/7/docs/api/java/util/Map.html?is-external=true).

[StaticBucketMap](http://docs.google.com/org/apache/commons/collections4/map/StaticBucketMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/StaticBucketMap.html),[V](http://docs.google.com/org/apache/commons/collections4/map/StaticBucketMap.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

A StaticBucketMap is an efficient, thread-safe implementation of java.util.Map that performs well in in a highly thread-contentious environment.

[StaticBucketMap()](http://docs.google.com/org/apache/commons/collections4/map/StaticBucketMap.html#StaticBucketMap--) - Constructor for class org.apache.commons.collections4.map.[StaticBucketMap](http://docs.google.com/org/apache/commons/collections4/map/StaticBucketMap.html)

Initializes the map with the default number of buckets (255).

[StaticBucketMap(int)](http://docs.google.com/org/apache/commons/collections4/map/StaticBucketMap.html#StaticBucketMap-int-) - Constructor for class org.apache.commons.collections4.map.[StaticBucketMap](http://docs.google.com/org/apache/commons/collections4/map/StaticBucketMap.html)

Initializes the map with a specified number of buckets.

[StringKeyAnalyzer](http://docs.google.com/org/apache/commons/collections4/trie/analyzer/StringKeyAnalyzer.html) - Class in [org.apache.commons.collections4.trie.analyzer](http://docs.google.com/org/apache/commons/collections4/trie/analyzer/package-summary.html)

An [KeyAnalyzer](http://docs.google.com/org/apache/commons/collections4/trie/KeyAnalyzer.html) for [String](https://docs.oracle.com/javase/7/docs/api/java/lang/String.html?is-external=true)s.

[StringKeyAnalyzer()](http://docs.google.com/org/apache/commons/collections4/trie/analyzer/StringKeyAnalyzer.html#StringKeyAnalyzer--) - Constructor for class org.apache.commons.collections4.trie.analyzer.[StringKeyAnalyzer](http://docs.google.com/org/apache/commons/collections4/trie/analyzer/StringKeyAnalyzer.html)   [StringValueTransformer](http://docs.google.com/org/apache/commons/collections4/functors/StringValueTransformer.html)<[T](http://docs.google.com/org/apache/commons/collections4/functors/StringValueTransformer.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Transformer implementation that returns the result of calling String.valueOf on the input object.

[stringValueTransformer()](http://docs.google.com/org/apache/commons/collections4/functors/StringValueTransformer.html#stringValueTransformer--) - Static method in class org.apache.commons.collections4.functors.[StringValueTransformer](http://docs.google.com/org/apache/commons/collections4/functors/StringValueTransformer.html)

Factory returning the singleton instance.

[stringValueTransformer()](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html#stringValueTransformer--) - Static method in class org.apache.commons.collections4.[TransformerUtils](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html)

Gets a transformer that returns a java.lang.String representation of the input object.

[sub](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedSubListIterator.html#sub) - Variable in class org.apache.commons.collections4.list.[AbstractLinkedList.LinkedSubListIterator](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedSubListIterator.html)

The parent list

[sub](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.SubCursor.html#sub) - Variable in class org.apache.commons.collections4.list.[CursorableLinkedList.SubCursor](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.SubCursor.html)

The parent list

[SubCursor(AbstractLinkedList.LinkedSubList<E>, int)](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.SubCursor.html#SubCursor-org.apache.commons.collections4.list.AbstractLinkedList.LinkedSubList-int-) - Constructor for class org.apache.commons.collections4.list.[CursorableLinkedList.SubCursor](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.SubCursor.html)

Constructs a new cursor.

[subList(int, int)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedSubList.html#subList-int-int-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList.LinkedSubList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.LinkedSubList.html)   [subList(int, int)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#subList-int-int-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)

Gets a sublist of the main list.

[subList(int, int)](http://docs.google.com/org/apache/commons/collections4/list/AbstractListDecorator.html#subList-int-int-) - Method in class org.apache.commons.collections4.list.[AbstractListDecorator](http://docs.google.com/org/apache/commons/collections4/list/AbstractListDecorator.html)   [subList(int, int)](http://docs.google.com/org/apache/commons/collections4/list/FixedSizeList.html#subList-int-int-) - Method in class org.apache.commons.collections4.list.[FixedSizeList](http://docs.google.com/org/apache/commons/collections4/list/FixedSizeList.html)   [subList(int, int)](http://docs.google.com/org/apache/commons/collections4/list/LazyList.html#subList-int-int-) - Method in class org.apache.commons.collections4.list.[LazyList](http://docs.google.com/org/apache/commons/collections4/list/LazyList.html)   [subList(int, int)](http://docs.google.com/org/apache/commons/collections4/list/PredicatedList.html#subList-int-int-) - Method in class org.apache.commons.collections4.list.[PredicatedList](http://docs.google.com/org/apache/commons/collections4/list/PredicatedList.html)   [subList(int, int)](http://docs.google.com/org/apache/commons/collections4/list/SetUniqueList.html#subList-int-int-) - Method in class org.apache.commons.collections4.list.[SetUniqueList](http://docs.google.com/org/apache/commons/collections4/list/SetUniqueList.html) [subList(int, int)](http://docs.google.com/org/apache/commons/collections4/list/TransformedList.html#subList-int-int-) - Method in class org.apache.commons.collections4.list.[TransformedList](http://docs.google.com/org/apache/commons/collections4/list/TransformedList.html)   [subList(int, int)](http://docs.google.com/org/apache/commons/collections4/list/UnmodifiableList.html#subList-int-int-) - Method in class org.apache.commons.collections4.list.[UnmodifiableList](http://docs.google.com/org/apache/commons/collections4/list/UnmodifiableList.html)   [subMap(K, K)](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractSortedBidiMapDecorator.html#subMap-K-K-) - Method in class org.apache.commons.collections4.bidimap.[AbstractSortedBidiMapDecorator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractSortedBidiMapDecorator.html)   [subMap(K, K)](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.html#subMap-K-K-) - Method in class org.apache.commons.collections4.bidimap.[DualTreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.html)   [subMap(K, K)](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.ViewMap.html#subMap-K-K-) - Method in class org.apache.commons.collections4.bidimap.[DualTreeBidiMap.ViewMap](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.ViewMap.html)   [subMap(K, K)](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableSortedBidiMap.html#subMap-K-K-) - Method in class org.apache.commons.collections4.bidimap.[UnmodifiableSortedBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableSortedBidiMap.html)   [subMap(K, K)](http://docs.google.com/org/apache/commons/collections4/map/AbstractSortedMapDecorator.html#subMap-K-K-) - Method in class org.apache.commons.collections4.map.[AbstractSortedMapDecorator](http://docs.google.com/org/apache/commons/collections4/map/AbstractSortedMapDecorator.html)   [subMap(K, K)](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeSortedMap.html#subMap-K-K-) - Method in class org.apache.commons.collections4.map.[FixedSizeSortedMap](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeSortedMap.html)   [subMap(K, K)](http://docs.google.com/org/apache/commons/collections4/map/LazySortedMap.html#subMap-K-K-) - Method in class org.apache.commons.collections4.map.[LazySortedMap](http://docs.google.com/org/apache/commons/collections4/map/LazySortedMap.html)   [subMap(K, K)](http://docs.google.com/org/apache/commons/collections4/map/PredicatedSortedMap.html#subMap-K-K-) - Method in class org.apache.commons.collections4.map.[PredicatedSortedMap](http://docs.google.com/org/apache/commons/collections4/map/PredicatedSortedMap.html)   [subMap(K, K)](http://docs.google.com/org/apache/commons/collections4/map/TransformedSortedMap.html#subMap-K-K-) - Method in class org.apache.commons.collections4.map.[TransformedSortedMap](http://docs.google.com/org/apache/commons/collections4/map/TransformedSortedMap.html)   [subMap(K, K)](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableSortedMap.html#subMap-K-K-) - Method in class org.apache.commons.collections4.map.[UnmodifiableSortedMap](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableSortedMap.html)   [subMap(K, K)](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html#subMap-K-K-) - Method in class org.apache.commons.collections4.trie.[UnmodifiableTrie](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html)   [subSet(E, boolean, E, boolean)](http://docs.google.com/org/apache/commons/collections4/set/AbstractNavigableSetDecorator.html#subSet-E-boolean-E-boolean-) - Method in class org.apache.commons.collections4.set.[AbstractNavigableSetDecorator](http://docs.google.com/org/apache/commons/collections4/set/AbstractNavigableSetDecorator.html)   [subSet(E, E)](http://docs.google.com/org/apache/commons/collections4/set/AbstractSortedSetDecorator.html#subSet-E-E-) - Method in class org.apache.commons.collections4.set.[AbstractSortedSetDecorator](http://docs.google.com/org/apache/commons/collections4/set/AbstractSortedSetDecorator.html)   [subSet(E, boolean, E, boolean)](http://docs.google.com/org/apache/commons/collections4/set/PredicatedNavigableSet.html#subSet-E-boolean-E-boolean-) - Method in class org.apache.commons.collections4.set.[PredicatedNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/PredicatedNavigableSet.html)   [subSet(E, E)](http://docs.google.com/org/apache/commons/collections4/set/PredicatedSortedSet.html#subSet-E-E-) - Method in class org.apache.commons.collections4.set.[PredicatedSortedSet](http://docs.google.com/org/apache/commons/collections4/set/PredicatedSortedSet.html)   [subSet(E, boolean, E, boolean)](http://docs.google.com/org/apache/commons/collections4/set/TransformedNavigableSet.html#subSet-E-boolean-E-boolean-) - Method in class org.apache.commons.collections4.set.[TransformedNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/TransformedNavigableSet.html)   [subSet(E, E)](http://docs.google.com/org/apache/commons/collections4/set/TransformedSortedSet.html#subSet-E-E-) - Method in class org.apache.commons.collections4.set.[TransformedSortedSet](http://docs.google.com/org/apache/commons/collections4/set/TransformedSortedSet.html)   [subSet(E, E)](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableNavigableSet.html#subSet-E-E-) - Method in class org.apache.commons.collections4.set.[UnmodifiableNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableNavigableSet.html)   [subSet(E, boolean, E, boolean)](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableNavigableSet.html#subSet-E-boolean-E-boolean-) - Method in class org.apache.commons.collections4.set.[UnmodifiableNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableNavigableSet.html)   [subSet(E, E)](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableSortedSet.html#subSet-E-E-) - Method in class org.apache.commons.collections4.set.[UnmodifiableSortedSet](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableSortedSet.html)   [subtract(Iterable<? extends O>, Iterable<? extends O>)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#subtract-java.lang.Iterable-java.lang.Iterable-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Returns a new [Collection](https://docs.oracle.com/javase/7/docs/api/java/util/Collection.html?is-external=true) containing <i>a</i> - <i>b</i>.

[subtract(Iterable<? extends O>, Iterable<? extends O>, Predicate<O>)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#subtract-java.lang.Iterable-java.lang.Iterable-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Returns a new [Collection](https://docs.oracle.com/javase/7/docs/api/java/util/Collection.html?is-external=true) containing *a* minus a subset of *b*.

[subtract(List<E>, List<? extends E>)](http://docs.google.com/org/apache/commons/collections4/ListUtils.html#subtract-java.util.List-java.util.List-) - Static method in class org.apache.commons.collections4.[ListUtils](http://docs.google.com/org/apache/commons/collections4/ListUtils.html)

Subtracts all elements in the second list from the first list, placing the results in a new list.

[sum(List<? extends E>, List<? extends E>)](http://docs.google.com/org/apache/commons/collections4/ListUtils.html#sum-java.util.List-java.util.List-) - Static method in class org.apache.commons.collections4.[ListUtils](http://docs.google.com/org/apache/commons/collections4/ListUtils.html)

Returns the sum of the given lists.

[switchClosure(Predicate<? super E>[], Closure<? super E>[])](http://docs.google.com/org/apache/commons/collections4/ClosureUtils.html#switchClosure-org.apache.commons.collections4.Predicate:A-org.apache.commons.collections4.Closure:A-) - Static method in class org.apache.commons.collections4.[ClosureUtils](http://docs.google.com/org/apache/commons/collections4/ClosureUtils.html)

Create a new Closure that calls one of the closures depending on the predicates.

[switchClosure(Predicate<? super E>[], Closure<? super E>[], Closure<? super E>)](http://docs.google.com/org/apache/commons/collections4/ClosureUtils.html#switchClosure-org.apache.commons.collections4.Predicate:A-org.apache.commons.collections4.Closure:A-org.apache.commons.collections4.Closure-) - Static method in class org.apache.commons.collections4.[ClosureUtils](http://docs.google.com/org/apache/commons/collections4/ClosureUtils.html)

Create a new Closure that calls one of the closures depending on the predicates.

[switchClosure(Map<Predicate<E>, Closure<E>>)](http://docs.google.com/org/apache/commons/collections4/ClosureUtils.html#switchClosure-java.util.Map-) - Static method in class org.apache.commons.collections4.[ClosureUtils](http://docs.google.com/org/apache/commons/collections4/ClosureUtils.html)

Create a new Closure that calls one of the closures depending on the predicates.

[SwitchClosure](http://docs.google.com/org/apache/commons/collections4/functors/SwitchClosure.html)<[E](http://docs.google.com/org/apache/commons/collections4/functors/SwitchClosure.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Closure implementation calls the closure whose predicate returns true, like a switch statement.

[SwitchClosure(Predicate<? super E>[], Closure<? super E>[], Closure<? super E>)](http://docs.google.com/org/apache/commons/collections4/functors/SwitchClosure.html#SwitchClosure-org.apache.commons.collections4.Predicate:A-org.apache.commons.collections4.Closure:A-org.apache.commons.collections4.Closure-) - Constructor for class org.apache.commons.collections4.functors.[SwitchClosure](http://docs.google.com/org/apache/commons/collections4/functors/SwitchClosure.html)

Constructor that performs no validation.

[switchClosure(Predicate<? super E>[], Closure<? super E>[], Closure<? super E>)](http://docs.google.com/org/apache/commons/collections4/functors/SwitchClosure.html#switchClosure-org.apache.commons.collections4.Predicate:A-org.apache.commons.collections4.Closure:A-org.apache.commons.collections4.Closure-) - Static method in class org.apache.commons.collections4.functors.[SwitchClosure](http://docs.google.com/org/apache/commons/collections4/functors/SwitchClosure.html)

Factory method that performs validation and copies the parameter arrays.

[switchClosure(Map<Predicate<E>, Closure<E>>)](http://docs.google.com/org/apache/commons/collections4/functors/SwitchClosure.html#switchClosure-java.util.Map-) - Static method in class org.apache.commons.collections4.functors.[SwitchClosure](http://docs.google.com/org/apache/commons/collections4/functors/SwitchClosure.html)

Create a new Closure that calls one of the closures depending on the predicates.

[switchMapClosure(Map<? extends E, Closure<E>>)](http://docs.google.com/org/apache/commons/collections4/ClosureUtils.html#switchMapClosure-java.util.Map-) - Static method in class org.apache.commons.collections4.[ClosureUtils](http://docs.google.com/org/apache/commons/collections4/ClosureUtils.html)

Create a new Closure that uses the input object as a key to find the closure to call.

[switchMapTransformer(Map<I, Transformer<I, O>>)](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html#switchMapTransformer-java.util.Map-) - Static method in class org.apache.commons.collections4.[TransformerUtils](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html)

Create a new Transformer that uses the input object as a key to find the transformer to call.

[SwitchTransformer](http://docs.google.com/org/apache/commons/collections4/functors/SwitchTransformer.html)<[I](http://docs.google.com/org/apache/commons/collections4/functors/SwitchTransformer.html),[O](http://docs.google.com/org/apache/commons/collections4/functors/SwitchTransformer.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Transformer implementation calls the transformer whose predicate returns true, like a switch statement.

[SwitchTransformer(Predicate<? super I>[], Transformer<? super I, ? extends O>[], Transformer<? super I, ? extends O>)](http://docs.google.com/org/apache/commons/collections4/functors/SwitchTransformer.html#SwitchTransformer-org.apache.commons.collections4.Predicate:A-org.apache.commons.collections4.Transformer:A-org.apache.commons.collections4.Transformer-) - Constructor for class org.apache.commons.collections4.functors.[SwitchTransformer](http://docs.google.com/org/apache/commons/collections4/functors/SwitchTransformer.html)

Constructor that performs no validation.

[switchTransformer(Predicate<? super I>[], Transformer<? super I, ? extends O>[], Transformer<? super I, ? extends O>)](http://docs.google.com/org/apache/commons/collections4/functors/SwitchTransformer.html#switchTransformer-org.apache.commons.collections4.Predicate:A-org.apache.commons.collections4.Transformer:A-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.functors.[SwitchTransformer](http://docs.google.com/org/apache/commons/collections4/functors/SwitchTransformer.html)

Factory method that performs validation and copies the parameter arrays.

[switchTransformer(Map<? extends Predicate<? super I>, ? extends Transformer<? super I, ? extends O>>)](http://docs.google.com/org/apache/commons/collections4/functors/SwitchTransformer.html#switchTransformer-java.util.Map-) - Static method in class org.apache.commons.collections4.functors.[SwitchTransformer](http://docs.google.com/org/apache/commons/collections4/functors/SwitchTransformer.html)

Create a new Transformer that calls one of the transformers depending on the predicates.

[switchTransformer(Predicate<? super I>, Transformer<? super I, ? extends O>, Transformer<? super I, ? extends O>)](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html#switchTransformer-org.apache.commons.collections4.Predicate-org.apache.commons.collections4.Transformer-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.[TransformerUtils](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html)

Deprecated.

as of 4.1, use [TransformerUtils.ifTransformer(Predicate, Transformer, Transformer)](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html#ifTransformer-org.apache.commons.collections4.Predicate-org.apache.commons.collections4.Transformer-org.apache.commons.collections4.Transformer-)

[switchTransformer(Predicate<? super I>[], Transformer<? super I, ? extends O>[])](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html#switchTransformer-org.apache.commons.collections4.Predicate:A-org.apache.commons.collections4.Transformer:A-) - Static method in class org.apache.commons.collections4.[TransformerUtils](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html)

Create a new Transformer that calls one of the transformers depending on the predicates.

[switchTransformer(Predicate<? super I>[], Transformer<? super I, ? extends O>[], Transformer<? super I, ? extends O>)](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html#switchTransformer-org.apache.commons.collections4.Predicate:A-org.apache.commons.collections4.Transformer:A-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.[TransformerUtils](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html)

Create a new Transformer that calls one of the transformers depending on the predicates.

[switchTransformer(Map<Predicate<I>, Transformer<I, O>>)](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html#switchTransformer-java.util.Map-) - Static method in class org.apache.commons.collections4.[TransformerUtils](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html)

Create a new Transformer that calls one of the transformers depending on the predicates.

[SynchronizedBag](http://docs.google.com/org/apache/commons/collections4/bag/SynchronizedBag.html)<[E](http://docs.google.com/org/apache/commons/collections4/bag/SynchronizedBag.html)> - Class in [org.apache.commons.collections4.bag](http://docs.google.com/org/apache/commons/collections4/bag/package-summary.html)

Decorates another [Bag](http://docs.google.com/org/apache/commons/collections4/Bag.html) to synchronize its behaviour for a multi-threaded environment.

[SynchronizedBag(Bag<E>)](http://docs.google.com/org/apache/commons/collections4/bag/SynchronizedBag.html#SynchronizedBag-org.apache.commons.collections4.Bag-) - Constructor for class org.apache.commons.collections4.bag.[SynchronizedBag](http://docs.google.com/org/apache/commons/collections4/bag/SynchronizedBag.html)

Constructor that wraps (not copies).

[SynchronizedBag(Bag<E>, Object)](http://docs.google.com/org/apache/commons/collections4/bag/SynchronizedBag.html#SynchronizedBag-org.apache.commons.collections4.Bag-java.lang.Object-) - Constructor for class org.apache.commons.collections4.bag.[SynchronizedBag](http://docs.google.com/org/apache/commons/collections4/bag/SynchronizedBag.html)

Constructor that wraps (not copies).

[synchronizedBag(Bag<E>)](http://docs.google.com/org/apache/commons/collections4/bag/SynchronizedBag.html#synchronizedBag-org.apache.commons.collections4.Bag-) - Static method in class org.apache.commons.collections4.bag.[SynchronizedBag](http://docs.google.com/org/apache/commons/collections4/bag/SynchronizedBag.html)

Factory method to create a synchronized bag.

[synchronizedBag(Bag<E>)](http://docs.google.com/org/apache/commons/collections4/BagUtils.html#synchronizedBag-org.apache.commons.collections4.Bag-) - Static method in class org.apache.commons.collections4.[BagUtils](http://docs.google.com/org/apache/commons/collections4/BagUtils.html)

Returns a synchronized (thread-safe) bag backed by the given bag.

[SynchronizedCollection](http://docs.google.com/org/apache/commons/collections4/collection/SynchronizedCollection.html)<[E](http://docs.google.com/org/apache/commons/collections4/collection/SynchronizedCollection.html)> - Class in [org.apache.commons.collections4.collection](http://docs.google.com/org/apache/commons/collections4/collection/package-summary.html)

Decorates another [Collection](https://docs.oracle.com/javase/7/docs/api/java/util/Collection.html?is-external=true) to synchronize its behaviour for a multi-threaded environment.

[SynchronizedCollection(Collection<E>)](http://docs.google.com/org/apache/commons/collections4/collection/SynchronizedCollection.html#SynchronizedCollection-java.util.Collection-) - Constructor for class org.apache.commons.collections4.collection.[SynchronizedCollection](http://docs.google.com/org/apache/commons/collections4/collection/SynchronizedCollection.html)

Constructor that wraps (not copies).

[SynchronizedCollection(Collection<E>, Object)](http://docs.google.com/org/apache/commons/collections4/collection/SynchronizedCollection.html#SynchronizedCollection-java.util.Collection-java.lang.Object-) - Constructor for class org.apache.commons.collections4.collection.[SynchronizedCollection](http://docs.google.com/org/apache/commons/collections4/collection/SynchronizedCollection.html)

Constructor that wraps (not copies).

[synchronizedCollection(Collection<T>)](http://docs.google.com/org/apache/commons/collections4/collection/SynchronizedCollection.html#synchronizedCollection-java.util.Collection-) - Static method in class org.apache.commons.collections4.collection.[SynchronizedCollection](http://docs.google.com/org/apache/commons/collections4/collection/SynchronizedCollection.html)

Factory method to create a synchronized collection.

[synchronizedCollection(Collection<C>)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#synchronizedCollection-java.util.Collection-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Deprecated.

since 4.1, use [Collections.synchronizedCollection(Collection)](https://docs.oracle.com/javase/7/docs/api/java/util/Collections.html?is-external=true#synchronizedCollection-java.util.Collection-) instead

[synchronizedList(List<E>)](http://docs.google.com/org/apache/commons/collections4/ListUtils.html#synchronizedList-java.util.List-) - Static method in class org.apache.commons.collections4.[ListUtils](http://docs.google.com/org/apache/commons/collections4/ListUtils.html)

Returns a synchronized list backed by the given list.

[synchronizedMap(Map<K, V>)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#synchronizedMap-java.util.Map-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Returns a synchronized map backed by the given map.

[SynchronizedMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/SynchronizedMultiSet.html)<[E](http://docs.google.com/org/apache/commons/collections4/multiset/SynchronizedMultiSet.html)> - Class in [org.apache.commons.collections4.multiset](http://docs.google.com/org/apache/commons/collections4/multiset/package-summary.html)

Decorates another [MultiSet](http://docs.google.com/org/apache/commons/collections4/MultiSet.html) to synchronize its behaviour for a multi-threaded environment.

[SynchronizedMultiSet(MultiSet<E>)](http://docs.google.com/org/apache/commons/collections4/multiset/SynchronizedMultiSet.html#SynchronizedMultiSet-org.apache.commons.collections4.MultiSet-) - Constructor for class org.apache.commons.collections4.multiset.[SynchronizedMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/SynchronizedMultiSet.html)

Constructor that wraps (not copies).

[SynchronizedMultiSet(MultiSet<E>, Object)](http://docs.google.com/org/apache/commons/collections4/multiset/SynchronizedMultiSet.html#SynchronizedMultiSet-org.apache.commons.collections4.MultiSet-java.lang.Object-) - Constructor for class org.apache.commons.collections4.multiset.[SynchronizedMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/SynchronizedMultiSet.html)

Constructor that wraps (not copies).

[synchronizedMultiSet(MultiSet<E>)](http://docs.google.com/org/apache/commons/collections4/multiset/SynchronizedMultiSet.html#synchronizedMultiSet-org.apache.commons.collections4.MultiSet-) - Static method in class org.apache.commons.collections4.multiset.[SynchronizedMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/SynchronizedMultiSet.html)

Factory method to create a synchronized multiset.

[synchronizedMultiSet(MultiSet<E>)](http://docs.google.com/org/apache/commons/collections4/MultiSetUtils.html#synchronizedMultiSet-org.apache.commons.collections4.MultiSet-) - Static method in class org.apache.commons.collections4.[MultiSetUtils](http://docs.google.com/org/apache/commons/collections4/MultiSetUtils.html)

Returns a synchronized (thread-safe) multiset backed by the given multiset.

[SynchronizedQueue](http://docs.google.com/org/apache/commons/collections4/queue/SynchronizedQueue.html)<[E](http://docs.google.com/org/apache/commons/collections4/queue/SynchronizedQueue.html)> - Class in [org.apache.commons.collections4.queue](http://docs.google.com/org/apache/commons/collections4/queue/package-summary.html)

Decorates another [Queue](https://docs.oracle.com/javase/7/docs/api/java/util/Queue.html?is-external=true) to synchronize its behaviour for a multi-threaded environment.

[SynchronizedQueue(Queue<E>)](http://docs.google.com/org/apache/commons/collections4/queue/SynchronizedQueue.html#SynchronizedQueue-java.util.Queue-) - Constructor for class org.apache.commons.collections4.queue.[SynchronizedQueue](http://docs.google.com/org/apache/commons/collections4/queue/SynchronizedQueue.html)

Constructor that wraps (not copies).

[SynchronizedQueue(Queue<E>, Object)](http://docs.google.com/org/apache/commons/collections4/queue/SynchronizedQueue.html#SynchronizedQueue-java.util.Queue-java.lang.Object-) - Constructor for class org.apache.commons.collections4.queue.[SynchronizedQueue](http://docs.google.com/org/apache/commons/collections4/queue/SynchronizedQueue.html)

Constructor that wraps (not copies).

[synchronizedQueue(Queue<E>)](http://docs.google.com/org/apache/commons/collections4/queue/SynchronizedQueue.html#synchronizedQueue-java.util.Queue-) - Static method in class org.apache.commons.collections4.queue.[SynchronizedQueue](http://docs.google.com/org/apache/commons/collections4/queue/SynchronizedQueue.html)

Factory method to create a synchronized queue.

[synchronizedQueue(Queue<E>)](http://docs.google.com/org/apache/commons/collections4/QueueUtils.html#synchronizedQueue-java.util.Queue-) - Static method in class org.apache.commons.collections4.[QueueUtils](http://docs.google.com/org/apache/commons/collections4/QueueUtils.html)

Returns a synchronized (thread-safe) queue backed by the given queue.

[synchronizedSet(Set<E>)](http://docs.google.com/org/apache/commons/collections4/SetUtils.html#synchronizedSet-java.util.Set-) - Static method in class org.apache.commons.collections4.[SetUtils](http://docs.google.com/org/apache/commons/collections4/SetUtils.html)

Returns a synchronized set backed by the given set.

[SynchronizedSortedBag](http://docs.google.com/org/apache/commons/collections4/bag/SynchronizedSortedBag.html)<[E](http://docs.google.com/org/apache/commons/collections4/bag/SynchronizedSortedBag.html)> - Class in [org.apache.commons.collections4.bag](http://docs.google.com/org/apache/commons/collections4/bag/package-summary.html)

Decorates another [SortedBag](http://docs.google.com/org/apache/commons/collections4/SortedBag.html) to synchronize its behaviour for a multi-threaded environment.

[SynchronizedSortedBag(SortedBag<E>)](http://docs.google.com/org/apache/commons/collections4/bag/SynchronizedSortedBag.html#SynchronizedSortedBag-org.apache.commons.collections4.SortedBag-) - Constructor for class org.apache.commons.collections4.bag.[SynchronizedSortedBag](http://docs.google.com/org/apache/commons/collections4/bag/SynchronizedSortedBag.html)

Constructor that wraps (not copies).

[SynchronizedSortedBag(Bag<E>, Object)](http://docs.google.com/org/apache/commons/collections4/bag/SynchronizedSortedBag.html#SynchronizedSortedBag-org.apache.commons.collections4.Bag-java.lang.Object-) - Constructor for class org.apache.commons.collections4.bag.[SynchronizedSortedBag](http://docs.google.com/org/apache/commons/collections4/bag/SynchronizedSortedBag.html)

Constructor that wraps (not copies).

[synchronizedSortedBag(SortedBag<E>)](http://docs.google.com/org/apache/commons/collections4/bag/SynchronizedSortedBag.html#synchronizedSortedBag-org.apache.commons.collections4.SortedBag-) - Static method in class org.apache.commons.collections4.bag.[SynchronizedSortedBag](http://docs.google.com/org/apache/commons/collections4/bag/SynchronizedSortedBag.html)

Factory method to create a synchronized sorted bag.

[synchronizedSortedBag(SortedBag<E>)](http://docs.google.com/org/apache/commons/collections4/BagUtils.html#synchronizedSortedBag-org.apache.commons.collections4.SortedBag-) - Static method in class org.apache.commons.collections4.[BagUtils](http://docs.google.com/org/apache/commons/collections4/BagUtils.html)

Returns a synchronized (thread-safe) sorted bag backed by the given sorted bag.

[synchronizedSortedMap(SortedMap<K, V>)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#synchronizedSortedMap-java.util.SortedMap-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Returns a synchronized sorted map backed by the given sorted map.

[synchronizedSortedSet(SortedSet<E>)](http://docs.google.com/org/apache/commons/collections4/SetUtils.html#synchronizedSortedSet-java.util.SortedSet-) - Static method in class org.apache.commons.collections4.[SetUtils](http://docs.google.com/org/apache/commons/collections4/SetUtils.html)

Returns a synchronized sorted set backed by the given sorted set.

## T

[tailMap(K)](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractSortedBidiMapDecorator.html#tailMap-K-) - Method in class org.apache.commons.collections4.bidimap.[AbstractSortedBidiMapDecorator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractSortedBidiMapDecorator.html)   [tailMap(K)](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.html#tailMap-K-) - Method in class org.apache.commons.collections4.bidimap.[DualTreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.html)   [tailMap(K)](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.ViewMap.html#tailMap-K-) - Method in class org.apache.commons.collections4.bidimap.[DualTreeBidiMap.ViewMap](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.ViewMap.html)   [tailMap(K)](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableSortedBidiMap.html#tailMap-K-) - Method in class org.apache.commons.collections4.bidimap.[UnmodifiableSortedBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableSortedBidiMap.html)   [tailMap(K)](http://docs.google.com/org/apache/commons/collections4/map/AbstractSortedMapDecorator.html#tailMap-K-) - Method in class org.apache.commons.collections4.map.[AbstractSortedMapDecorator](http://docs.google.com/org/apache/commons/collections4/map/AbstractSortedMapDecorator.html)   [tailMap(K)](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeSortedMap.html#tailMap-K-) - Method in class org.apache.commons.collections4.map.[FixedSizeSortedMap](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeSortedMap.html)   [tailMap(K)](http://docs.google.com/org/apache/commons/collections4/map/LazySortedMap.html#tailMap-K-) - Method in class org.apache.commons.collections4.map.[LazySortedMap](http://docs.google.com/org/apache/commons/collections4/map/LazySortedMap.html)   [tailMap(K)](http://docs.google.com/org/apache/commons/collections4/map/PredicatedSortedMap.html#tailMap-K-) - Method in class org.apache.commons.collections4.map.[PredicatedSortedMap](http://docs.google.com/org/apache/commons/collections4/map/PredicatedSortedMap.html)   [tailMap(K)](http://docs.google.com/org/apache/commons/collections4/map/TransformedSortedMap.html#tailMap-K-) - Method in class org.apache.commons.collections4.map.[TransformedSortedMap](http://docs.google.com/org/apache/commons/collections4/map/TransformedSortedMap.html)   [tailMap(K)](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableSortedMap.html#tailMap-K-) - Method in class org.apache.commons.collections4.map.[UnmodifiableSortedMap](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableSortedMap.html)   [tailMap(K)](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html#tailMap-K-) - Method in class org.apache.commons.collections4.trie.[UnmodifiableTrie](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html)   [tailSet(E, boolean)](http://docs.google.com/org/apache/commons/collections4/set/AbstractNavigableSetDecorator.html#tailSet-E-boolean-) - Method in class org.apache.commons.collections4.set.[AbstractNavigableSetDecorator](http://docs.google.com/org/apache/commons/collections4/set/AbstractNavigableSetDecorator.html)   [tailSet(E)](http://docs.google.com/org/apache/commons/collections4/set/AbstractSortedSetDecorator.html#tailSet-E-) - Method in class org.apache.commons.collections4.set.[AbstractSortedSetDecorator](http://docs.google.com/org/apache/commons/collections4/set/AbstractSortedSetDecorator.html)   [tailSet(E, boolean)](http://docs.google.com/org/apache/commons/collections4/set/PredicatedNavigableSet.html#tailSet-E-boolean-) - Method in class org.apache.commons.collections4.set.[PredicatedNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/PredicatedNavigableSet.html)   [tailSet(E)](http://docs.google.com/org/apache/commons/collections4/set/PredicatedSortedSet.html#tailSet-E-) - Method in class org.apache.commons.collections4.set.[PredicatedSortedSet](http://docs.google.com/org/apache/commons/collections4/set/PredicatedSortedSet.html)   [tailSet(E, boolean)](http://docs.google.com/org/apache/commons/collections4/set/TransformedNavigableSet.html#tailSet-E-boolean-) - Method in class org.apache.commons.collections4.set.[TransformedNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/TransformedNavigableSet.html)   [tailSet(E)](http://docs.google.com/org/apache/commons/collections4/set/TransformedSortedSet.html#tailSet-E-) - Method in class org.apache.commons.collections4.set.[TransformedSortedSet](http://docs.google.com/org/apache/commons/collections4/set/TransformedSortedSet.html)   [tailSet(E)](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableNavigableSet.html#tailSet-E-) - Method in class org.apache.commons.collections4.set.[UnmodifiableNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableNavigableSet.html)   [tailSet(E, boolean)](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableNavigableSet.html#tailSet-E-boolean-) - Method in class org.apache.commons.collections4.set.[UnmodifiableNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableNavigableSet.html)   [tailSet(E)](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableSortedSet.html#tailSet-E-) - Method in class org.apache.commons.collections4.set.[UnmodifiableSortedSet](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableSortedSet.html)   [TiedMapEntry](http://docs.google.com/org/apache/commons/collections4/keyvalue/TiedMapEntry.html)<[K](http://docs.google.com/org/apache/commons/collections4/keyvalue/TiedMapEntry.html),[V](http://docs.google.com/org/apache/commons/collections4/keyvalue/TiedMapEntry.html)> - Class in [org.apache.commons.collections4.keyvalue](http://docs.google.com/org/apache/commons/collections4/keyvalue/package-summary.html)

A [Map.Entry](https://docs.oracle.com/javase/7/docs/api/java/util/Map.Entry.html?is-external=true) tied to a map underneath.

[TiedMapEntry(Map<K, V>, K)](http://docs.google.com/org/apache/commons/collections4/keyvalue/TiedMapEntry.html#TiedMapEntry-java.util.Map-K-) - Constructor for class org.apache.commons.collections4.keyvalue.[TiedMapEntry](http://docs.google.com/org/apache/commons/collections4/keyvalue/TiedMapEntry.html)

Constructs a new entry with the given Map and key.

[toArray()](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html#toArray--) - Method in class org.apache.commons.collections4.bag.[AbstractMapBag](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html)

Returns an array of all of this bag's elements.

[toArray(T[])](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html#toArray-T:A-) - Method in class org.apache.commons.collections4.bag.[AbstractMapBag](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html)

Returns an array of all of this bag's elements.

[toArray()](http://docs.google.com/org/apache/commons/collections4/collection/AbstractCollectionDecorator.html#toArray--) - Method in class org.apache.commons.collections4.collection.[AbstractCollectionDecorator](http://docs.google.com/org/apache/commons/collections4/collection/AbstractCollectionDecorator.html)   [toArray(T[])](http://docs.google.com/org/apache/commons/collections4/collection/AbstractCollectionDecorator.html#toArray-T:A-) - Method in class org.apache.commons.collections4.collection.[AbstractCollectionDecorator](http://docs.google.com/org/apache/commons/collections4/collection/AbstractCollectionDecorator.html)   [toArray()](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html#toArray--) - Method in class org.apache.commons.collections4.collection.[CompositeCollection](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html)

Returns an array containing all of the elements in this composite.

[toArray(T[])](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html#toArray-T:A-) - Method in class org.apache.commons.collections4.collection.[CompositeCollection](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html)

Returns an object array, populating the supplied array if possible.

[toArray()](http://docs.google.com/org/apache/commons/collections4/collection/SynchronizedCollection.html#toArray--) - Method in class org.apache.commons.collections4.collection.[SynchronizedCollection](http://docs.google.com/org/apache/commons/collections4/collection/SynchronizedCollection.html)   [toArray(T[])](http://docs.google.com/org/apache/commons/collections4/collection/SynchronizedCollection.html#toArray-T:A-) - Method in class org.apache.commons.collections4.collection.[SynchronizedCollection](http://docs.google.com/org/apache/commons/collections4/collection/SynchronizedCollection.html)   [toArray(Class<E>)](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html#toArray-java.lang.Class-) - Method in class org.apache.commons.collections4.[FluentIterable](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html)

Returns an array containing all elements of this iterable by traversing its iterator.

[toArray(Iterator<?>)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#toArray-java.util.Iterator-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets an array based on an iterator.

[toArray(Iterator<? extends E>, Class<E>)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#toArray-java.util.Iterator-java.lang.Class-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets an array based on an iterator.

[toArray()](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#toArray--) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)   [toArray(T[])](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#toArray-T:A-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)   [toArray()](http://docs.google.com/org/apache/commons/collections4/list/TreeList.html#toArray--) - Method in class org.apache.commons.collections4.list.[TreeList](http://docs.google.com/org/apache/commons/collections4/list/TreeList.html)

Converts the list into an array.

[toArray()](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableEntrySet.html#toArray--) - Method in class org.apache.commons.collections4.map.[UnmodifiableEntrySet](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableEntrySet.html)   [toArray(T[])](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableEntrySet.html#toArray-T:A-) - Method in class org.apache.commons.collections4.map.[UnmodifiableEntrySet](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableEntrySet.html)   [toArray()](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.html#toArray--) - Method in class org.apache.commons.collections4.multiset.[AbstractMapMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.html)

Returns an array of all of this multiset's elements.

[toArray(T[])](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.html#toArray-T:A-) - Method in class org.apache.commons.collections4.multiset.[AbstractMapMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.html)

Returns an array of all of this multiset's elements.

[toArray()](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html#toArray--) - Method in class org.apache.commons.collections4.set.[CompositeSet](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html)

Returns an array containing all of the elements in this composite.

[toArray(T[])](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html#toArray-T:A-) - Method in class org.apache.commons.collections4.set.[CompositeSet](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html)

Returns an object array, populating the supplied array if possible.

[toArray()](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html#toArray--) - Method in class org.apache.commons.collections4.set.[ListOrderedSet](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html)   [toArray(T[])](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html#toArray-T:A-) - Method in class org.apache.commons.collections4.set.[ListOrderedSet](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html)   [toArray()](http://docs.google.com/org/apache/commons/collections4/set/MapBackedSet.html#toArray--) - Method in class org.apache.commons.collections4.set.[MapBackedSet](http://docs.google.com/org/apache/commons/collections4/set/MapBackedSet.html)   [toArray(T[])](http://docs.google.com/org/apache/commons/collections4/set/MapBackedSet.html#toArray-T:A-) - Method in class org.apache.commons.collections4.set.[MapBackedSet](http://docs.google.com/org/apache/commons/collections4/set/MapBackedSet.html)   [toCollection()](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html#toCollection--) - Method in class org.apache.commons.collections4.collection.[CompositeCollection](http://docs.google.com/org/apache/commons/collections4/collection/CompositeCollection.html)

Returns a new collection containing all of the elements

[toList(Enumeration<? extends E>)](http://docs.google.com/org/apache/commons/collections4/EnumerationUtils.html#toList-java.util.Enumeration-) - Static method in class org.apache.commons.collections4.[EnumerationUtils](http://docs.google.com/org/apache/commons/collections4/EnumerationUtils.html)

Creates a list based on an enumeration.

[toList(StringTokenizer)](http://docs.google.com/org/apache/commons/collections4/EnumerationUtils.html#toList-java.util.StringTokenizer-) - Static method in class org.apache.commons.collections4.[EnumerationUtils](http://docs.google.com/org/apache/commons/collections4/EnumerationUtils.html)

Override toList(Enumeration) for StringTokenizer as it implements Enumeration<Object> for the sake of backward compatibility.

[toList()](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html#toList--) - Method in class org.apache.commons.collections4.[FluentIterable](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html)

Returns a mutable list containing all elements of this iterable by traversing its iterator.

[toList(Iterable<E>)](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#toList-java.lang.Iterable-) - Static method in class org.apache.commons.collections4.[IterableUtils](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html)

Gets a new list with the contents of the provided iterable.

[toList(Iterator<? extends E>)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#toList-java.util.Iterator-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets a list based on an iterator.

[toList(Iterator<? extends E>, int)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#toList-java.util.Iterator-int-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets a list based on an iterator.

[toListIterator(Iterator<? extends E>)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#toListIterator-java.util.Iterator-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets a list iterator based on a simple iterator.

[toMap(ResourceBundle)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#toMap-java.util.ResourceBundle-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Creates a new HashMap using data copied from a ResourceBundle.

[toMapEntry()](http://docs.google.com/org/apache/commons/collections4/keyvalue/DefaultKeyValue.html#toMapEntry--) - Method in class org.apache.commons.collections4.keyvalue.[DefaultKeyValue](http://docs.google.com/org/apache/commons/collections4/keyvalue/DefaultKeyValue.html)

Returns a new Map.Entry object with key and value from this pair.

[toProperties(Map<K, V>)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#toProperties-java.util.Map-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Gets a new Properties object initialised with the values from a Map.

[toReference(AbstractReferenceMap.ReferenceStrength, T, int)](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html#toReference-org.apache.commons.collections4.map.AbstractReferenceMap.ReferenceStrength-T-int-) - Method in class org.apache.commons.collections4.map.[AbstractReferenceMap.ReferenceEntry](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceEntry.html)

Constructs a reference of the given type to the given referent.

[toSet()](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html#toSet--) - Method in class org.apache.commons.collections4.set.[CompositeSet](http://docs.google.com/org/apache/commons/collections4/set/CompositeSet.html)

Returns a new Set containing all of the elements.

[toSet()](http://docs.google.com/org/apache/commons/collections4/SetUtils.SetView.html#toSet--) - Method in class org.apache.commons.collections4.[SetUtils.SetView](http://docs.google.com/org/apache/commons/collections4/SetUtils.SetView.html)

Returns a new set containing the contents of this view.

[toString()](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html#toString--) - Method in class org.apache.commons.collections4.bag.[AbstractMapBag](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html)

Implement a toString() method suitable for debugging.

[toString()](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.BidiMapIterator.html#toString--) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.BidiMapIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.BidiMapIterator.html)   [toString()](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html#toString--) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html)   [toString()](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.BidiOrderedMapIterator.html#toString--) - Method in class org.apache.commons.collections4.bidimap.[DualTreeBidiMap.BidiOrderedMapIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.BidiOrderedMapIterator.html)   [toString()](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html#toString--) - Method in class org.apache.commons.collections4.bidimap.[TreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html)

Returns a string version of this Map in standard format.

[toString()](http://docs.google.com/org/apache/commons/collections4/collection/AbstractCollectionDecorator.html#toString--) - Method in class org.apache.commons.collections4.collection.[AbstractCollectionDecorator](http://docs.google.com/org/apache/commons/collections4/collection/AbstractCollectionDecorator.html)   [toString()](http://docs.google.com/org/apache/commons/collections4/collection/SynchronizedCollection.html#toString--) - Method in class org.apache.commons.collections4.collection.[SynchronizedCollection](http://docs.google.com/org/apache/commons/collections4/collection/SynchronizedCollection.html)   [toString()](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html#toString--) - Method in class org.apache.commons.collections4.[FluentIterable](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html) [toString(Iterable<E>)](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#toString-java.lang.Iterable-) - Static method in class org.apache.commons.collections4.[IterableUtils](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html)

Returns a string representation of the elements of the specified iterable.

[toString(Iterable<E>, Transformer<? super E, String>)](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#toString-java.lang.Iterable-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.[IterableUtils](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html)

Returns a string representation of the elements of the specified iterable.

[toString(Iterable<E>, Transformer<? super E, String>, String, String, String)](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#toString-java.lang.Iterable-org.apache.commons.collections4.Transformer-java.lang.String-java.lang.String-java.lang.String-) - Static method in class org.apache.commons.collections4.[IterableUtils](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html)

Returns a string representation of the elements of the specified iterable.

[toString()](http://docs.google.com/org/apache/commons/collections4/iterators/EntrySetMapIterator.html#toString--) - Method in class org.apache.commons.collections4.iterators.[EntrySetMapIterator](http://docs.google.com/org/apache/commons/collections4/iterators/EntrySetMapIterator.html)

Gets the iterator as a String.

[toString(Iterator<E>)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#toString-java.util.Iterator-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Returns a string representation of the elements of the specified iterator.

[toString(Iterator<E>, Transformer<? super E, String>)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#toString-java.util.Iterator-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Returns a string representation of the elements of the specified iterator.

[toString(Iterator<E>, Transformer<? super E, String>, String, String, String)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#toString-java.util.Iterator-org.apache.commons.collections4.Transformer-java.lang.String-java.lang.String-java.lang.String-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Returns a string representation of the elements of the specified iterator.

[toString()](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractKeyValue.html#toString--) - Method in class org.apache.commons.collections4.keyvalue.[AbstractKeyValue](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractKeyValue.html)

Gets a debugging String view of the pair.

[toString()](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractMapEntryDecorator.html#toString--) - Method in class org.apache.commons.collections4.keyvalue.[AbstractMapEntryDecorator](http://docs.google.com/org/apache/commons/collections4/keyvalue/AbstractMapEntryDecorator.html)   [toString()](http://docs.google.com/org/apache/commons/collections4/keyvalue/MultiKey.html#toString--) - Method in class org.apache.commons.collections4.keyvalue.[MultiKey](http://docs.google.com/org/apache/commons/collections4/keyvalue/MultiKey.html)

Gets a debugging string version of the key.

[toString()](http://docs.google.com/org/apache/commons/collections4/keyvalue/TiedMapEntry.html#toString--) - Method in class org.apache.commons.collections4.keyvalue.[TiedMapEntry](http://docs.google.com/org/apache/commons/collections4/keyvalue/TiedMapEntry.html)

Gets a string version of the entry.

[toString()](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#toString--) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)   [toString()](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html#toString--) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap.HashEntry](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html)   [toString()](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashIterator.html#toString--) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap.HashIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashIterator.html)   [toString()](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#toString--) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Gets the map as a String.

[toString()](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkIterator.html#toString--) - Method in class org.apache.commons.collections4.map.[AbstractLinkedMap.LinkIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.LinkIterator.html)   [toString()](http://docs.google.com/org/apache/commons/collections4/map/AbstractMapDecorator.html#toString--) - Method in class org.apache.commons.collections4.map.[AbstractMapDecorator](http://docs.google.com/org/apache/commons/collections4/map/AbstractMapDecorator.html)   [toString()](http://docs.google.com/org/apache/commons/collections4/map/Flat3Map.html#toString--) - Method in class org.apache.commons.collections4.map.[Flat3Map](http://docs.google.com/org/apache/commons/collections4/map/Flat3Map.html)

Gets the map as a String.

[toString()](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html#toString--) - Method in class org.apache.commons.collections4.map.[ListOrderedMap](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html)

Returns the Map as a string.

[toString()](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html#toString--) - Method in class org.apache.commons.collections4.map.[SingletonMap](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html)

Gets the map as a String.

[toString()](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html#toString--) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html)   [toString()](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html#toString--) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMapDecorator](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html)   [toString()](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.AbstractEntry.html#toString--) - Method in class org.apache.commons.collections4.multiset.[AbstractMultiSet.AbstractEntry](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.AbstractEntry.html)   [toString()](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html#toString--) - Method in class org.apache.commons.collections4.multiset.[AbstractMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html)

Implement a toString() method suitable for debugging.

[toString()](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html#toString--) - Method in class org.apache.commons.collections4.set.[ListOrderedSet](http://docs.google.com/org/apache/commons/collections4/set/ListOrderedSet.html)

Uses the underlying List's toString so that order is achieved.

[toString()](http://docs.google.com/org/apache/commons/collections4/splitmap/AbstractIterableGetMapDecorator.html#toString--) - Method in class org.apache.commons.collections4.splitmap.[AbstractIterableGetMapDecorator](http://docs.google.com/org/apache/commons/collections4/splitmap/AbstractIterableGetMapDecorator.html)   [toString()](http://docs.google.com/org/apache/commons/collections4/trie/AbstractBitwiseTrie.html#toString--) - Method in class org.apache.commons.collections4.trie.[AbstractBitwiseTrie](http://docs.google.com/org/apache/commons/collections4/trie/AbstractBitwiseTrie.html)   [toString()](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html#toString--) - Method in class org.apache.commons.collections4.trie.[UnmodifiableTrie](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html)   [totalSize()](http://docs.google.com/org/apache/commons/collections4/map/MultiValueMap.html#totalSize--) - Method in class org.apache.commons.collections4.map.[MultiValueMap](http://docs.google.com/org/apache/commons/collections4/map/MultiValueMap.html)

Deprecated.

Gets the total size of the map by counting all the values.

[transform(E)](http://docs.google.com/org/apache/commons/collections4/collection/TransformedCollection.html#transform-E-) - Method in class org.apache.commons.collections4.collection.[TransformedCollection](http://docs.google.com/org/apache/commons/collections4/collection/TransformedCollection.html)

Transforms an object.

[transform(Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/collection/TransformedCollection.html#transform-java.util.Collection-) - Method in class org.apache.commons.collections4.collection.[TransformedCollection](http://docs.google.com/org/apache/commons/collections4/collection/TransformedCollection.html)

Transforms a collection.

[transform(Collection<C>, Transformer<? super C, ? extends C>)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#transform-java.util.Collection-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Transform the collection by applying a Transformer to each element.

[transform(Transformer<? super E, ? extends O>)](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html#transform-org.apache.commons.collections4.Transformer-) - Method in class org.apache.commons.collections4.[FluentIterable](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html)

Returns a new FluentIterable whose iterator will return all elements of this iterable transformed by the provided transformer.

[transform(T)](http://docs.google.com/org/apache/commons/collections4/functors/ChainedTransformer.html#transform-T-) - Method in class org.apache.commons.collections4.functors.[ChainedTransformer](http://docs.google.com/org/apache/commons/collections4/functors/ChainedTransformer.html)

Transforms the input to result via each decorated transformer

[transform(T)](http://docs.google.com/org/apache/commons/collections4/functors/CloneTransformer.html#transform-T-) - Method in class org.apache.commons.collections4.functors.[CloneTransformer](http://docs.google.com/org/apache/commons/collections4/functors/CloneTransformer.html)

Transforms the input to result by cloning it.

[transform(T)](http://docs.google.com/org/apache/commons/collections4/functors/ClosureTransformer.html#transform-T-) - Method in class org.apache.commons.collections4.functors.[ClosureTransformer](http://docs.google.com/org/apache/commons/collections4/functors/ClosureTransformer.html)

Transforms the input to result by executing a closure.

[transform(I)](http://docs.google.com/org/apache/commons/collections4/functors/ConstantTransformer.html#transform-I-) - Method in class org.apache.commons.collections4.functors.[ConstantTransformer](http://docs.google.com/org/apache/commons/collections4/functors/ConstantTransformer.html)

Transforms the input by ignoring it and returning the stored constant instead.

[transform(I)](http://docs.google.com/org/apache/commons/collections4/functors/ExceptionTransformer.html#transform-I-) - Method in class org.apache.commons.collections4.functors.[ExceptionTransformer](http://docs.google.com/org/apache/commons/collections4/functors/ExceptionTransformer.html)

Transforms the input to result by cloning it.

[transform(I)](http://docs.google.com/org/apache/commons/collections4/functors/FactoryTransformer.html#transform-I-) - Method in class org.apache.commons.collections4.functors.[FactoryTransformer](http://docs.google.com/org/apache/commons/collections4/functors/FactoryTransformer.html)

Transforms the input by ignoring the input and returning the result of calling the decorated factory.

[transform(I)](http://docs.google.com/org/apache/commons/collections4/functors/IfTransformer.html#transform-I-) - Method in class org.apache.commons.collections4.functors.[IfTransformer](http://docs.google.com/org/apache/commons/collections4/functors/IfTransformer.html)

Transforms the input using the true or false transformer based to the result of the predicate.

[transform(Class<? extends T>)](http://docs.google.com/org/apache/commons/collections4/functors/InstantiateTransformer.html#transform-java.lang.Class-) - Method in class org.apache.commons.collections4.functors.[InstantiateTransformer](http://docs.google.com/org/apache/commons/collections4/functors/InstantiateTransformer.html)

Transforms the input Class object to a result by instantiation.

[transform(Object)](http://docs.google.com/org/apache/commons/collections4/functors/InvokerTransformer.html#transform-java.lang.Object-) - Method in class org.apache.commons.collections4.functors.[InvokerTransformer](http://docs.google.com/org/apache/commons/collections4/functors/InvokerTransformer.html)

Transforms the input to result by invoking a method on the input.

[transform(I)](http://docs.google.com/org/apache/commons/collections4/functors/MapTransformer.html#transform-I-) - Method in class org.apache.commons.collections4.functors.[MapTransformer](http://docs.google.com/org/apache/commons/collections4/functors/MapTransformer.html)

Transforms the input to result by looking it up in a Map.

[transform(T)](http://docs.google.com/org/apache/commons/collections4/functors/NOPTransformer.html#transform-T-) - Method in class org.apache.commons.collections4.functors.[NOPTransformer](http://docs.google.com/org/apache/commons/collections4/functors/NOPTransformer.html)

Transforms the input to result by doing nothing.

[transform(T)](http://docs.google.com/org/apache/commons/collections4/functors/PredicateTransformer.html#transform-T-) - Method in class org.apache.commons.collections4.functors.[PredicateTransformer](http://docs.google.com/org/apache/commons/collections4/functors/PredicateTransformer.html)

Transforms the input to result by calling a predicate.

[transform(T)](http://docs.google.com/org/apache/commons/collections4/functors/StringValueTransformer.html#transform-T-) - Method in class org.apache.commons.collections4.functors.[StringValueTransformer](http://docs.google.com/org/apache/commons/collections4/functors/StringValueTransformer.html)

Transforms the input to result by calling String.valueOf.

[transform(I)](http://docs.google.com/org/apache/commons/collections4/functors/SwitchTransformer.html#transform-I-) - Method in class org.apache.commons.collections4.functors.[SwitchTransformer](http://docs.google.com/org/apache/commons/collections4/functors/SwitchTransformer.html)

Transforms the input to result by calling the transformer whose matching predicate returns true.

[transform(I)](http://docs.google.com/org/apache/commons/collections4/iterators/TransformIterator.html#transform-I-) - Method in class org.apache.commons.collections4.iterators.[TransformIterator](http://docs.google.com/org/apache/commons/collections4/iterators/TransformIterator.html)

Transforms the given object using the transformer.

[transform(I)](http://docs.google.com/org/apache/commons/collections4/Transformer.html#transform-I-) - Method in interface org.apache.commons.collections4.[Transformer](http://docs.google.com/org/apache/commons/collections4/Transformer.html)

Transforms the input object (leaving it unchanged) into some output object.

[TransformedBag](http://docs.google.com/org/apache/commons/collections4/bag/TransformedBag.html)<[E](http://docs.google.com/org/apache/commons/collections4/bag/TransformedBag.html)> - Class in [org.apache.commons.collections4.bag](http://docs.google.com/org/apache/commons/collections4/bag/package-summary.html)

Decorates another [Bag](http://docs.google.com/org/apache/commons/collections4/Bag.html) to transform objects that are added.

[TransformedBag(Bag<E>, Transformer<? super E, ? extends E>)](http://docs.google.com/org/apache/commons/collections4/bag/TransformedBag.html#TransformedBag-org.apache.commons.collections4.Bag-org.apache.commons.collections4.Transformer-) - Constructor for class org.apache.commons.collections4.bag.[TransformedBag](http://docs.google.com/org/apache/commons/collections4/bag/TransformedBag.html)

Constructor that wraps (not copies).

[transformedBag(Bag<E>, Transformer<? super E, ? extends E>)](http://docs.google.com/org/apache/commons/collections4/bag/TransformedBag.html#transformedBag-org.apache.commons.collections4.Bag-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.bag.[TransformedBag](http://docs.google.com/org/apache/commons/collections4/bag/TransformedBag.html)

Factory method to create a transforming bag that will transform existing contents of the specified bag.

[TransformedCollection](http://docs.google.com/org/apache/commons/collections4/collection/TransformedCollection.html)<[E](http://docs.google.com/org/apache/commons/collections4/collection/TransformedCollection.html)> - Class in [org.apache.commons.collections4.collection](http://docs.google.com/org/apache/commons/collections4/collection/package-summary.html)

Decorates another [Collection](https://docs.oracle.com/javase/7/docs/api/java/util/Collection.html?is-external=true) to transform objects that are added.

[TransformedCollection(Collection<E>, Transformer<? super E, ? extends E>)](http://docs.google.com/org/apache/commons/collections4/collection/TransformedCollection.html#TransformedCollection-java.util.Collection-org.apache.commons.collections4.Transformer-) - Constructor for class org.apache.commons.collections4.collection.[TransformedCollection](http://docs.google.com/org/apache/commons/collections4/collection/TransformedCollection.html)

Constructor that wraps (not copies).

[transformedCollection(Collection<E>, Transformer<? super E, ? extends E>)](http://docs.google.com/org/apache/commons/collections4/collection/TransformedCollection.html#transformedCollection-java.util.Collection-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.collection.[TransformedCollection](http://docs.google.com/org/apache/commons/collections4/collection/TransformedCollection.html)

Factory method to create a transforming collection that will transform existing contents of the specified collection.

[transformedComparator(Comparator<O>, Transformer<? super I, ? extends O>)](http://docs.google.com/org/apache/commons/collections4/ComparatorUtils.html#transformedComparator-java.util.Comparator-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.[ComparatorUtils](http://docs.google.com/org/apache/commons/collections4/ComparatorUtils.html)

Gets a Comparator that passes transformed objects to the given comparator.

[transformedIterable(Iterable<I>, Transformer<? super I, ? extends O>)](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#transformedIterable-java.lang.Iterable-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.[IterableUtils](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html)

Returns a transformed view of the given iterable where all of its elements have been transformed by the provided transformer.

[transformedIterator(Iterator<? extends I>, Transformer<? super I, ? extends O>)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#transformedIterator-java.util.Iterator-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets an iterator that transforms the elements of another iterator.

[TransformedList](http://docs.google.com/org/apache/commons/collections4/list/TransformedList.html)<[E](http://docs.google.com/org/apache/commons/collections4/list/TransformedList.html)> - Class in [org.apache.commons.collections4.list](http://docs.google.com/org/apache/commons/collections4/list/package-summary.html)

Decorates another List to transform objects that are added.

[TransformedList(List<E>, Transformer<? super E, ? extends E>)](http://docs.google.com/org/apache/commons/collections4/list/TransformedList.html#TransformedList-java.util.List-org.apache.commons.collections4.Transformer-) - Constructor for class org.apache.commons.collections4.list.[TransformedList](http://docs.google.com/org/apache/commons/collections4/list/TransformedList.html)

Constructor that wraps (not copies).

[transformedList(List<E>, Transformer<? super E, ? extends E>)](http://docs.google.com/org/apache/commons/collections4/list/TransformedList.html#transformedList-java.util.List-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.list.[TransformedList](http://docs.google.com/org/apache/commons/collections4/list/TransformedList.html)

Factory method to create a transforming list that will transform existing contents of the specified list.

[transformedList(List<E>, Transformer<? super E, ? extends E>)](http://docs.google.com/org/apache/commons/collections4/ListUtils.html#transformedList-java.util.List-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.[ListUtils](http://docs.google.com/org/apache/commons/collections4/ListUtils.html)

Returns a transformed list backed by the given list.

[TransformedList.TransformedListIterator](http://docs.google.com/org/apache/commons/collections4/list/TransformedList.TransformedListIterator.html) - Class in [org.apache.commons.collections4.list](http://docs.google.com/org/apache/commons/collections4/list/package-summary.html)

Inner class Iterator for the TransformedList

[TransformedListIterator(ListIterator<E>)](http://docs.google.com/org/apache/commons/collections4/list/TransformedList.TransformedListIterator.html#TransformedListIterator-java.util.ListIterator-) - Constructor for class org.apache.commons.collections4.list.[TransformedList.TransformedListIterator](http://docs.google.com/org/apache/commons/collections4/list/TransformedList.TransformedListIterator.html)

Create a new transformed list iterator.

[TransformedMap](http://docs.google.com/org/apache/commons/collections4/map/TransformedMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/TransformedMap.html),[V](http://docs.google.com/org/apache/commons/collections4/map/TransformedMap.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

Decorates another Map to transform objects that are added.

[TransformedMap(Map<K, V>, Transformer<? super K, ? extends K>, Transformer<? super V, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/TransformedMap.html#TransformedMap-java.util.Map-org.apache.commons.collections4.Transformer-org.apache.commons.collections4.Transformer-) - Constructor for class org.apache.commons.collections4.map.[TransformedMap](http://docs.google.com/org/apache/commons/collections4/map/TransformedMap.html)

Constructor that wraps (not copies).

[transformedMap(Map<K, V>, Transformer<? super K, ? extends K>, Transformer<? super V, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/TransformedMap.html#transformedMap-java.util.Map-org.apache.commons.collections4.Transformer-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.map.[TransformedMap](http://docs.google.com/org/apache/commons/collections4/map/TransformedMap.html)

Factory method to create a transforming map that will transform existing contents of the specified map.

[transformedMap(Map<K, V>, Transformer<? super K, ? extends K>, Transformer<? super V, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#transformedMap-java.util.Map-org.apache.commons.collections4.Transformer-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Returns a transformed map backed by the given map.

[transformedMap(MultiValuedMap<K, V>, Transformer<? super K, ? extends K>, Transformer<? super V, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/multimap/TransformedMultiValuedMap.html#transformedMap-org.apache.commons.collections4.MultiValuedMap-org.apache.commons.collections4.Transformer-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.multimap.[TransformedMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/TransformedMultiValuedMap.html)

Factory method to create a transforming MultiValuedMap that will transform existing contents of the specified map.

[TransformedMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/TransformedMultiValuedMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/multimap/TransformedMultiValuedMap.html),[V](http://docs.google.com/org/apache/commons/collections4/multimap/TransformedMultiValuedMap.html)> - Class in [org.apache.commons.collections4.multimap](http://docs.google.com/org/apache/commons/collections4/multimap/package-summary.html)

Decorates another MultiValuedMap to transform objects that are added.

[TransformedMultiValuedMap(MultiValuedMap<K, V>, Transformer<? super K, ? extends K>, Transformer<? super V, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/multimap/TransformedMultiValuedMap.html#TransformedMultiValuedMap-org.apache.commons.collections4.MultiValuedMap-org.apache.commons.collections4.Transformer-org.apache.commons.collections4.Transformer-) - Constructor for class org.apache.commons.collections4.multimap.[TransformedMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/TransformedMultiValuedMap.html)

Constructor that wraps (not copies).

[transformedMultiValuedMap(MultiValuedMap<K, V>, Transformer<? super K, ? extends K>, Transformer<? super V, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/MultiMapUtils.html#transformedMultiValuedMap-org.apache.commons.collections4.MultiValuedMap-org.apache.commons.collections4.Transformer-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.[MultiMapUtils](http://docs.google.com/org/apache/commons/collections4/MultiMapUtils.html)

Returns a TransformedMultiValuedMap backed by the given map.

[TransformedNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/TransformedNavigableSet.html)<[E](http://docs.google.com/org/apache/commons/collections4/set/TransformedNavigableSet.html)> - Class in [org.apache.commons.collections4.set](http://docs.google.com/org/apache/commons/collections4/set/package-summary.html)

Decorates another NavigableSet to transform objects that are added.

[TransformedNavigableSet(NavigableSet<E>, Transformer<? super E, ? extends E>)](http://docs.google.com/org/apache/commons/collections4/set/TransformedNavigableSet.html#TransformedNavigableSet-java.util.NavigableSet-org.apache.commons.collections4.Transformer-) - Constructor for class org.apache.commons.collections4.set.[TransformedNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/TransformedNavigableSet.html)

Constructor that wraps (not copies).

[transformedNavigableSet(NavigableSet<E>, Transformer<? super E, ? extends E>)](http://docs.google.com/org/apache/commons/collections4/set/TransformedNavigableSet.html#transformedNavigableSet-java.util.NavigableSet-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.set.[TransformedNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/TransformedNavigableSet.html)

Factory method to create a transforming navigable set that will transform existing contents of the specified navigable set.

[transformedNavigableSet(NavigableSet<E>, Transformer<? super E, ? extends E>)](http://docs.google.com/org/apache/commons/collections4/SetUtils.html#transformedNavigableSet-java.util.NavigableSet-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.[SetUtils](http://docs.google.com/org/apache/commons/collections4/SetUtils.html)

Returns a transformed navigable set backed by the given navigable set.

[TransformedPredicate](http://docs.google.com/org/apache/commons/collections4/functors/TransformedPredicate.html)<[T](http://docs.google.com/org/apache/commons/collections4/functors/TransformedPredicate.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Predicate implementation that transforms the given object before invoking another Predicate.

[TransformedPredicate(Transformer<? super T, ? extends T>, Predicate<? super T>)](http://docs.google.com/org/apache/commons/collections4/functors/TransformedPredicate.html#TransformedPredicate-org.apache.commons.collections4.Transformer-org.apache.commons.collections4.Predicate-) - Constructor for class org.apache.commons.collections4.functors.[TransformedPredicate](http://docs.google.com/org/apache/commons/collections4/functors/TransformedPredicate.html)

Constructor that performs no validation.

[transformedPredicate(Transformer<? super T, ? extends T>, Predicate<? super T>)](http://docs.google.com/org/apache/commons/collections4/functors/TransformedPredicate.html#transformedPredicate-org.apache.commons.collections4.Transformer-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.functors.[TransformedPredicate](http://docs.google.com/org/apache/commons/collections4/functors/TransformedPredicate.html)

Factory to create the predicate.

[transformedPredicate(Transformer<? super T, ? extends T>, Predicate<? super T>)](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html#transformedPredicate-org.apache.commons.collections4.Transformer-org.apache.commons.collections4.Predicate-) - Static method in class org.apache.commons.collections4.[PredicateUtils](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html)

Creates a predicate that transforms the input object before passing it to the predicate.

[TransformedQueue](http://docs.google.com/org/apache/commons/collections4/queue/TransformedQueue.html)<[E](http://docs.google.com/org/apache/commons/collections4/queue/TransformedQueue.html)> - Class in [org.apache.commons.collections4.queue](http://docs.google.com/org/apache/commons/collections4/queue/package-summary.html)

Decorates another [Queue](https://docs.oracle.com/javase/7/docs/api/java/util/Queue.html?is-external=true) to transform objects that are added.

[TransformedQueue(Queue<E>, Transformer<? super E, ? extends E>)](http://docs.google.com/org/apache/commons/collections4/queue/TransformedQueue.html#TransformedQueue-java.util.Queue-org.apache.commons.collections4.Transformer-) - Constructor for class org.apache.commons.collections4.queue.[TransformedQueue](http://docs.google.com/org/apache/commons/collections4/queue/TransformedQueue.html)

Constructor that wraps (not copies).

[transformedQueue(Queue<E>, Transformer<? super E, ? extends E>)](http://docs.google.com/org/apache/commons/collections4/queue/TransformedQueue.html#transformedQueue-java.util.Queue-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.queue.[TransformedQueue](http://docs.google.com/org/apache/commons/collections4/queue/TransformedQueue.html)

Factory method to create a transforming queue that will transform existing contents of the specified queue.

[TransformedSet](http://docs.google.com/org/apache/commons/collections4/set/TransformedSet.html)<[E](http://docs.google.com/org/apache/commons/collections4/set/TransformedSet.html)> - Class in [org.apache.commons.collections4.set](http://docs.google.com/org/apache/commons/collections4/set/package-summary.html)

Decorates another Set to transform objects that are added.

[TransformedSet(Set<E>, Transformer<? super E, ? extends E>)](http://docs.google.com/org/apache/commons/collections4/set/TransformedSet.html#TransformedSet-java.util.Set-org.apache.commons.collections4.Transformer-) - Constructor for class org.apache.commons.collections4.set.[TransformedSet](http://docs.google.com/org/apache/commons/collections4/set/TransformedSet.html)

Constructor that wraps (not copies).

[transformedSet(Set<E>, Transformer<? super E, ? extends E>)](http://docs.google.com/org/apache/commons/collections4/set/TransformedSet.html#transformedSet-java.util.Set-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.set.[TransformedSet](http://docs.google.com/org/apache/commons/collections4/set/TransformedSet.html)

Factory method to create a transforming set that will transform existing contents of the specified set.

[transformedSet(Set<E>, Transformer<? super E, ? extends E>)](http://docs.google.com/org/apache/commons/collections4/SetUtils.html#transformedSet-java.util.Set-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.[SetUtils](http://docs.google.com/org/apache/commons/collections4/SetUtils.html)

Returns a transformed set backed by the given set.

[TransformedSortedBag](http://docs.google.com/org/apache/commons/collections4/bag/TransformedSortedBag.html)<[E](http://docs.google.com/org/apache/commons/collections4/bag/TransformedSortedBag.html)> - Class in [org.apache.commons.collections4.bag](http://docs.google.com/org/apache/commons/collections4/bag/package-summary.html)

Decorates another [SortedBag](http://docs.google.com/org/apache/commons/collections4/SortedBag.html) to transform objects that are added.

[TransformedSortedBag(SortedBag<E>, Transformer<? super E, ? extends E>)](http://docs.google.com/org/apache/commons/collections4/bag/TransformedSortedBag.html#TransformedSortedBag-org.apache.commons.collections4.SortedBag-org.apache.commons.collections4.Transformer-) - Constructor for class org.apache.commons.collections4.bag.[TransformedSortedBag](http://docs.google.com/org/apache/commons/collections4/bag/TransformedSortedBag.html)

Constructor that wraps (not copies).

[transformedSortedBag(SortedBag<E>, Transformer<? super E, ? extends E>)](http://docs.google.com/org/apache/commons/collections4/bag/TransformedSortedBag.html#transformedSortedBag-org.apache.commons.collections4.SortedBag-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.bag.[TransformedSortedBag](http://docs.google.com/org/apache/commons/collections4/bag/TransformedSortedBag.html)

Factory method to create a transforming sorted bag that will transform existing contents of the specified sorted bag.

[TransformedSortedMap](http://docs.google.com/org/apache/commons/collections4/map/TransformedSortedMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/TransformedSortedMap.html),[V](http://docs.google.com/org/apache/commons/collections4/map/TransformedSortedMap.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

Decorates another SortedMap to transform objects that are added.

[TransformedSortedMap(SortedMap<K, V>, Transformer<? super K, ? extends K>, Transformer<? super V, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/TransformedSortedMap.html#TransformedSortedMap-java.util.SortedMap-org.apache.commons.collections4.Transformer-org.apache.commons.collections4.Transformer-) - Constructor for class org.apache.commons.collections4.map.[TransformedSortedMap](http://docs.google.com/org/apache/commons/collections4/map/TransformedSortedMap.html)

Constructor that wraps (not copies).

[transformedSortedMap(SortedMap<K, V>, Transformer<? super K, ? extends K>, Transformer<? super V, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/TransformedSortedMap.html#transformedSortedMap-java.util.SortedMap-org.apache.commons.collections4.Transformer-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.map.[TransformedSortedMap](http://docs.google.com/org/apache/commons/collections4/map/TransformedSortedMap.html)

Factory method to create a transforming sorted map that will transform existing contents of the specified map.

[transformedSortedMap(SortedMap<K, V>, Transformer<? super K, ? extends K>, Transformer<? super V, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#transformedSortedMap-java.util.SortedMap-org.apache.commons.collections4.Transformer-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Returns a transformed sorted map backed by the given map.

[TransformedSortedSet](http://docs.google.com/org/apache/commons/collections4/set/TransformedSortedSet.html)<[E](http://docs.google.com/org/apache/commons/collections4/set/TransformedSortedSet.html)> - Class in [org.apache.commons.collections4.set](http://docs.google.com/org/apache/commons/collections4/set/package-summary.html)

Decorates another SortedSet to transform objects that are added.

[TransformedSortedSet(SortedSet<E>, Transformer<? super E, ? extends E>)](http://docs.google.com/org/apache/commons/collections4/set/TransformedSortedSet.html#TransformedSortedSet-java.util.SortedSet-org.apache.commons.collections4.Transformer-) - Constructor for class org.apache.commons.collections4.set.[TransformedSortedSet](http://docs.google.com/org/apache/commons/collections4/set/TransformedSortedSet.html)

Constructor that wraps (not copies).

[transformedSortedSet(SortedSet<E>, Transformer<? super E, ? extends E>)](http://docs.google.com/org/apache/commons/collections4/set/TransformedSortedSet.html#transformedSortedSet-java.util.SortedSet-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.set.[TransformedSortedSet](http://docs.google.com/org/apache/commons/collections4/set/TransformedSortedSet.html)

Factory method to create a transforming sorted set that will transform existing contents of the specified sorted set.

[transformedSortedSet(SortedSet<E>, Transformer<? super E, ? extends E>)](http://docs.google.com/org/apache/commons/collections4/SetUtils.html#transformedSortedSet-java.util.SortedSet-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.[SetUtils](http://docs.google.com/org/apache/commons/collections4/SetUtils.html)

Returns a transformed sorted set backed by the given set.

[TransformedSplitMap](http://docs.google.com/org/apache/commons/collections4/splitmap/TransformedSplitMap.html)<[J](http://docs.google.com/org/apache/commons/collections4/splitmap/TransformedSplitMap.html),[K](http://docs.google.com/org/apache/commons/collections4/splitmap/TransformedSplitMap.html),[U](http://docs.google.com/org/apache/commons/collections4/splitmap/TransformedSplitMap.html),[V](http://docs.google.com/org/apache/commons/collections4/splitmap/TransformedSplitMap.html)> - Class in [org.apache.commons.collections4.splitmap](http://docs.google.com/org/apache/commons/collections4/splitmap/package-summary.html)

Decorates another [Map](https://docs.oracle.com/javase/7/docs/api/java/util/Map.html?is-external=true) to transform objects that are added.

[TransformedSplitMap(Map<K, V>, Transformer<? super J, ? extends K>, Transformer<? super U, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/splitmap/TransformedSplitMap.html#TransformedSplitMap-java.util.Map-org.apache.commons.collections4.Transformer-org.apache.commons.collections4.Transformer-) - Constructor for class org.apache.commons.collections4.splitmap.[TransformedSplitMap](http://docs.google.com/org/apache/commons/collections4/splitmap/TransformedSplitMap.html)

Constructor that wraps (not copies).

[transformer](http://docs.google.com/org/apache/commons/collections4/collection/TransformedCollection.html#transformer) - Variable in class org.apache.commons.collections4.collection.[TransformedCollection](http://docs.google.com/org/apache/commons/collections4/collection/TransformedCollection.html)

The transformer to use

[Transformer](http://docs.google.com/org/apache/commons/collections4/Transformer.html)<[I](http://docs.google.com/org/apache/commons/collections4/Transformer.html),[O](http://docs.google.com/org/apache/commons/collections4/Transformer.html)> - Interface in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

Defines a functor interface implemented by classes that transform one object into another.

[TransformerClosure](http://docs.google.com/org/apache/commons/collections4/functors/TransformerClosure.html)<[E](http://docs.google.com/org/apache/commons/collections4/functors/TransformerClosure.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Closure implementation that calls a Transformer using the input object and ignore the result.

[TransformerClosure(Transformer<? super E, ?>)](http://docs.google.com/org/apache/commons/collections4/functors/TransformerClosure.html#TransformerClosure-org.apache.commons.collections4.Transformer-) - Constructor for class org.apache.commons.collections4.functors.[TransformerClosure](http://docs.google.com/org/apache/commons/collections4/functors/TransformerClosure.html)

Constructor that performs no validation.

[transformerClosure(Transformer<? super E, ?>)](http://docs.google.com/org/apache/commons/collections4/functors/TransformerClosure.html#transformerClosure-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.functors.[TransformerClosure](http://docs.google.com/org/apache/commons/collections4/functors/TransformerClosure.html)

Factory method that performs validation.

[TransformerPredicate](http://docs.google.com/org/apache/commons/collections4/functors/TransformerPredicate.html)<[T](http://docs.google.com/org/apache/commons/collections4/functors/TransformerPredicate.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Predicate implementation that returns the result of a transformer.

[TransformerPredicate(Transformer<? super T, Boolean>)](http://docs.google.com/org/apache/commons/collections4/functors/TransformerPredicate.html#TransformerPredicate-org.apache.commons.collections4.Transformer-) - Constructor for class org.apache.commons.collections4.functors.[TransformerPredicate](http://docs.google.com/org/apache/commons/collections4/functors/TransformerPredicate.html)

Constructor that performs no validation.

[transformerPredicate(Transformer<? super T, Boolean>)](http://docs.google.com/org/apache/commons/collections4/functors/TransformerPredicate.html#transformerPredicate-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.functors.[TransformerPredicate](http://docs.google.com/org/apache/commons/collections4/functors/TransformerPredicate.html)

Factory to create the predicate.

[TransformerUtils](http://docs.google.com/org/apache/commons/collections4/TransformerUtils.html) - Class in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

TransformerUtils provides reference implementations and utilities for the Transformer functor interface.

[transformingBag(Bag<E>, Transformer<? super E, ? extends E>)](http://docs.google.com/org/apache/commons/collections4/bag/TransformedBag.html#transformingBag-org.apache.commons.collections4.Bag-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.bag.[TransformedBag](http://docs.google.com/org/apache/commons/collections4/bag/TransformedBag.html)

Factory method to create a transforming bag.

[transformingBag(Bag<E>, Transformer<? super E, ? extends E>)](http://docs.google.com/org/apache/commons/collections4/BagUtils.html#transformingBag-org.apache.commons.collections4.Bag-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.[BagUtils](http://docs.google.com/org/apache/commons/collections4/BagUtils.html)

Returns a transformed bag backed by the given bag.

[transformingCollection(Collection<E>, Transformer<? super E, ? extends E>)](http://docs.google.com/org/apache/commons/collections4/collection/TransformedCollection.html#transformingCollection-java.util.Collection-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.collection.[TransformedCollection](http://docs.google.com/org/apache/commons/collections4/collection/TransformedCollection.html)

Factory method to create a transforming collection.

[transformingCollection(Collection<E>, Transformer<? super E, ? extends E>)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#transformingCollection-java.util.Collection-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Returns a transformed bag backed by the given collection.

[TransformingComparator](http://docs.google.com/org/apache/commons/collections4/comparators/TransformingComparator.html)<[I](http://docs.google.com/org/apache/commons/collections4/comparators/TransformingComparator.html),[O](http://docs.google.com/org/apache/commons/collections4/comparators/TransformingComparator.html)> - Class in [org.apache.commons.collections4.comparators](http://docs.google.com/org/apache/commons/collections4/comparators/package-summary.html)

Decorates another Comparator with transformation behavior.

[TransformingComparator(Transformer<? super I, ? extends O>)](http://docs.google.com/org/apache/commons/collections4/comparators/TransformingComparator.html#TransformingComparator-org.apache.commons.collections4.Transformer-) - Constructor for class org.apache.commons.collections4.comparators.[TransformingComparator](http://docs.google.com/org/apache/commons/collections4/comparators/TransformingComparator.html)

Constructs an instance with the given Transformer and a [ComparableComparator](http://docs.google.com/org/apache/commons/collections4/comparators/ComparableComparator.html).

[TransformingComparator(Transformer<? super I, ? extends O>, Comparator<O>)](http://docs.google.com/org/apache/commons/collections4/comparators/TransformingComparator.html#TransformingComparator-org.apache.commons.collections4.Transformer-java.util.Comparator-) - Constructor for class org.apache.commons.collections4.comparators.[TransformingComparator](http://docs.google.com/org/apache/commons/collections4/comparators/TransformingComparator.html)

Constructs an instance with the given Transformer and Comparator.

[transformingList(List<E>, Transformer<? super E, ? extends E>)](http://docs.google.com/org/apache/commons/collections4/list/TransformedList.html#transformingList-java.util.List-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.list.[TransformedList](http://docs.google.com/org/apache/commons/collections4/list/TransformedList.html)

Factory method to create a transforming list.

[transformingMap(Map<K, V>, Transformer<? super K, ? extends K>, Transformer<? super V, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/TransformedMap.html#transformingMap-java.util.Map-org.apache.commons.collections4.Transformer-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.map.[TransformedMap](http://docs.google.com/org/apache/commons/collections4/map/TransformedMap.html)

Factory method to create a transforming map.

[transformingMap(MultiValuedMap<K, V>, Transformer<? super K, ? extends K>, Transformer<? super V, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/multimap/TransformedMultiValuedMap.html#transformingMap-org.apache.commons.collections4.MultiValuedMap-org.apache.commons.collections4.Transformer-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.multimap.[TransformedMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/TransformedMultiValuedMap.html)

Factory method to create a transforming MultiValuedMap.

[transformingMap(Map<K, V>, Transformer<? super J, ? extends K>, Transformer<? super U, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/splitmap/TransformedSplitMap.html#transformingMap-java.util.Map-org.apache.commons.collections4.Transformer-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.splitmap.[TransformedSplitMap](http://docs.google.com/org/apache/commons/collections4/splitmap/TransformedSplitMap.html)

Factory method to create a transforming map.

[transformingNavigableSet(NavigableSet<E>, Transformer<? super E, ? extends E>)](http://docs.google.com/org/apache/commons/collections4/set/TransformedNavigableSet.html#transformingNavigableSet-java.util.NavigableSet-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.set.[TransformedNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/TransformedNavigableSet.html)

Factory method to create a transforming navigable set.

[transformingQueue(Queue<E>, Transformer<? super E, ? extends E>)](http://docs.google.com/org/apache/commons/collections4/queue/TransformedQueue.html#transformingQueue-java.util.Queue-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.queue.[TransformedQueue](http://docs.google.com/org/apache/commons/collections4/queue/TransformedQueue.html)

Factory method to create a transforming queue.

[transformingQueue(Queue<E>, Transformer<? super E, ? extends E>)](http://docs.google.com/org/apache/commons/collections4/QueueUtils.html#transformingQueue-java.util.Queue-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.[QueueUtils](http://docs.google.com/org/apache/commons/collections4/QueueUtils.html)

Returns a transformed queue backed by the given queue.

[transformingSet(Set<E>, Transformer<? super E, ? extends E>)](http://docs.google.com/org/apache/commons/collections4/set/TransformedSet.html#transformingSet-java.util.Set-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.set.[TransformedSet](http://docs.google.com/org/apache/commons/collections4/set/TransformedSet.html)

Factory method to create a transforming set.

[transformingSortedBag(SortedBag<E>, Transformer<? super E, ? extends E>)](http://docs.google.com/org/apache/commons/collections4/bag/TransformedSortedBag.html#transformingSortedBag-org.apache.commons.collections4.SortedBag-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.bag.[TransformedSortedBag](http://docs.google.com/org/apache/commons/collections4/bag/TransformedSortedBag.html)

Factory method to create a transforming sorted bag.

[transformingSortedBag(SortedBag<E>, Transformer<? super E, ? extends E>)](http://docs.google.com/org/apache/commons/collections4/BagUtils.html#transformingSortedBag-org.apache.commons.collections4.SortedBag-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.[BagUtils](http://docs.google.com/org/apache/commons/collections4/BagUtils.html)

Returns a transformed sorted bag backed by the given bag.

[transformingSortedMap(SortedMap<K, V>, Transformer<? super K, ? extends K>, Transformer<? super V, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/TransformedSortedMap.html#transformingSortedMap-java.util.SortedMap-org.apache.commons.collections4.Transformer-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.map.[TransformedSortedMap](http://docs.google.com/org/apache/commons/collections4/map/TransformedSortedMap.html)

Factory method to create a transforming sorted map.

[transformingSortedSet(SortedSet<E>, Transformer<? super E, ? extends E>)](http://docs.google.com/org/apache/commons/collections4/set/TransformedSortedSet.html#transformingSortedSet-java.util.SortedSet-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.set.[TransformedSortedSet](http://docs.google.com/org/apache/commons/collections4/set/TransformedSortedSet.html)

Factory method to create a transforming sorted set.

[TransformIterator](http://docs.google.com/org/apache/commons/collections4/iterators/TransformIterator.html)<[I](http://docs.google.com/org/apache/commons/collections4/iterators/TransformIterator.html),[O](http://docs.google.com/org/apache/commons/collections4/iterators/TransformIterator.html)> - Class in [org.apache.commons.collections4.iterators](http://docs.google.com/org/apache/commons/collections4/iterators/package-summary.html)

Decorates an iterator such that each element returned is transformed.

[TransformIterator()](http://docs.google.com/org/apache/commons/collections4/iterators/TransformIterator.html#TransformIterator--) - Constructor for class org.apache.commons.collections4.iterators.[TransformIterator](http://docs.google.com/org/apache/commons/collections4/iterators/TransformIterator.html)

Constructs a new TransformIterator that will not function until the [setIterator](http://docs.google.com/org/apache/commons/collections4/iterators/TransformIterator.html#setIterator-java.util.Iterator-) and [TransformIterator.setTransformer(Transformer)](http://docs.google.com/org/apache/commons/collections4/iterators/TransformIterator.html#setTransformer-org.apache.commons.collections4.Transformer-) methods are invoked.

[TransformIterator(Iterator<? extends I>)](http://docs.google.com/org/apache/commons/collections4/iterators/TransformIterator.html#TransformIterator-java.util.Iterator-) - Constructor for class org.apache.commons.collections4.iterators.[TransformIterator](http://docs.google.com/org/apache/commons/collections4/iterators/TransformIterator.html)

Constructs a new TransformIterator that won't transform elements from the given iterator.

[TransformIterator(Iterator<? extends I>, Transformer<? super I, ? extends O>)](http://docs.google.com/org/apache/commons/collections4/iterators/TransformIterator.html#TransformIterator-java.util.Iterator-org.apache.commons.collections4.Transformer-) - Constructor for class org.apache.commons.collections4.iterators.[TransformIterator](http://docs.google.com/org/apache/commons/collections4/iterators/TransformIterator.html)

Constructs a new TransformIterator that will use the given iterator and transformer.

[transformKey(K)](http://docs.google.com/org/apache/commons/collections4/map/TransformedMap.html#transformKey-K-) - Method in class org.apache.commons.collections4.map.[TransformedMap](http://docs.google.com/org/apache/commons/collections4/map/TransformedMap.html)

Transforms a key.

[transformKey(K)](http://docs.google.com/org/apache/commons/collections4/multimap/TransformedMultiValuedMap.html#transformKey-K-) - Method in class org.apache.commons.collections4.multimap.[TransformedMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/TransformedMultiValuedMap.html)

Transforms a key.

[transformKey(J)](http://docs.google.com/org/apache/commons/collections4/splitmap/TransformedSplitMap.html#transformKey-J-) - Method in class org.apache.commons.collections4.splitmap.[TransformedSplitMap](http://docs.google.com/org/apache/commons/collections4/splitmap/TransformedSplitMap.html)

Transforms a key.

[transformMap(Map<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/TransformedMap.html#transformMap-java.util.Map-) - Method in class org.apache.commons.collections4.map.[TransformedMap](http://docs.google.com/org/apache/commons/collections4/map/TransformedMap.html)

Transforms a map.

[transformMap(Map<? extends J, ? extends U>)](http://docs.google.com/org/apache/commons/collections4/splitmap/TransformedSplitMap.html#transformMap-java.util.Map-) - Method in class org.apache.commons.collections4.splitmap.[TransformedSplitMap](http://docs.google.com/org/apache/commons/collections4/splitmap/TransformedSplitMap.html)

Transforms a map.

[transformValue(V)](http://docs.google.com/org/apache/commons/collections4/map/TransformedMap.html#transformValue-V-) - Method in class org.apache.commons.collections4.map.[TransformedMap](http://docs.google.com/org/apache/commons/collections4/map/TransformedMap.html)

Transforms a value.

[transformValue(V)](http://docs.google.com/org/apache/commons/collections4/multimap/TransformedMultiValuedMap.html#transformValue-V-) - Method in class org.apache.commons.collections4.multimap.[TransformedMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/TransformedMultiValuedMap.html)

Transforms a value.

[transformValue(U)](http://docs.google.com/org/apache/commons/collections4/splitmap/TransformedSplitMap.html#transformValue-U-) - Method in class org.apache.commons.collections4.splitmap.[TransformedSplitMap](http://docs.google.com/org/apache/commons/collections4/splitmap/TransformedSplitMap.html)

Transforms a value.

[TreeBag](http://docs.google.com/org/apache/commons/collections4/bag/TreeBag.html)<[E](http://docs.google.com/org/apache/commons/collections4/bag/TreeBag.html)> - Class in [org.apache.commons.collections4.bag](http://docs.google.com/org/apache/commons/collections4/bag/package-summary.html)

Implements [SortedBag](http://docs.google.com/org/apache/commons/collections4/SortedBag.html), using a [TreeMap](https://docs.oracle.com/javase/7/docs/api/java/util/TreeMap.html?is-external=true) to provide the data storage.

[TreeBag()](http://docs.google.com/org/apache/commons/collections4/bag/TreeBag.html#TreeBag--) - Constructor for class org.apache.commons.collections4.bag.[TreeBag](http://docs.google.com/org/apache/commons/collections4/bag/TreeBag.html)

Constructs an empty [TreeBag](http://docs.google.com/org/apache/commons/collections4/bag/TreeBag.html).

[TreeBag(Comparator<? super E>)](http://docs.google.com/org/apache/commons/collections4/bag/TreeBag.html#TreeBag-java.util.Comparator-) - Constructor for class org.apache.commons.collections4.bag.[TreeBag](http://docs.google.com/org/apache/commons/collections4/bag/TreeBag.html)

Constructs an empty bag that maintains order on its unique representative members according to the given [Comparator](https://docs.oracle.com/javase/7/docs/api/java/util/Comparator.html?is-external=true).

[TreeBag(Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/bag/TreeBag.html#TreeBag-java.util.Collection-) - Constructor for class org.apache.commons.collections4.bag.[TreeBag](http://docs.google.com/org/apache/commons/collections4/bag/TreeBag.html)

Constructs a [TreeBag](http://docs.google.com/org/apache/commons/collections4/bag/TreeBag.html) containing all the members of the specified collection.

[TreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html) extends [Comparable](https://docs.oracle.com/javase/7/docs/api/java/lang/Comparable.html?is-external=true)<[K](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html)>,[V](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html) extends [Comparable](https://docs.oracle.com/javase/7/docs/api/java/lang/Comparable.html?is-external=true)<[V](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html)>> - Class in [org.apache.commons.collections4.bidimap](http://docs.google.com/org/apache/commons/collections4/bidimap/package-summary.html)

Red-Black tree-based implementation of BidiMap where all objects added implement the Comparable interface.

[TreeBidiMap()](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html#TreeBidiMap--) - Constructor for class org.apache.commons.collections4.bidimap.[TreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html)

Constructs a new empty TreeBidiMap.

[TreeBidiMap(Map<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html#TreeBidiMap-java.util.Map-) - Constructor for class org.apache.commons.collections4.bidimap.[TreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html)

Constructs a new TreeBidiMap by copying an existing Map.

[TreeList](http://docs.google.com/org/apache/commons/collections4/list/TreeList.html)<[E](http://docs.google.com/org/apache/commons/collections4/list/TreeList.html)> - Class in [org.apache.commons.collections4.list](http://docs.google.com/org/apache/commons/collections4/list/package-summary.html)

A List implementation that is optimised for fast insertions and removals at any index in the list.

[TreeList()](http://docs.google.com/org/apache/commons/collections4/list/TreeList.html#TreeList--) - Constructor for class org.apache.commons.collections4.list.[TreeList](http://docs.google.com/org/apache/commons/collections4/list/TreeList.html)

Constructs a new empty list.

[TreeList(Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/list/TreeList.html#TreeList-java.util.Collection-) - Constructor for class org.apache.commons.collections4.list.[TreeList](http://docs.google.com/org/apache/commons/collections4/list/TreeList.html)

Constructs a new empty list that copies the specified collection.

[Trie](http://docs.google.com/org/apache/commons/collections4/Trie.html)<[K](http://docs.google.com/org/apache/commons/collections4/Trie.html),[V](http://docs.google.com/org/apache/commons/collections4/Trie.html)> - Interface in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

Defines the interface for a prefix tree, an ordered tree data structure.

[TrieUtils](http://docs.google.com/org/apache/commons/collections4/TrieUtils.html) - Class in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

A collection of [Trie](http://docs.google.com/org/apache/commons/collections4/Trie.html) utilities.

[trimToSize()](http://docs.google.com/org/apache/commons/collections4/multimap/ArrayListValuedHashMap.html#trimToSize--) - Method in class org.apache.commons.collections4.multimap.[ArrayListValuedHashMap](http://docs.google.com/org/apache/commons/collections4/multimap/ArrayListValuedHashMap.html)

Trims the capacity of all value collections to their current size.

[TruePredicate](http://docs.google.com/org/apache/commons/collections4/functors/TruePredicate.html)<[T](http://docs.google.com/org/apache/commons/collections4/functors/TruePredicate.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Predicate implementation that always returns true.

[truePredicate()](http://docs.google.com/org/apache/commons/collections4/functors/TruePredicate.html#truePredicate--) - Static method in class org.apache.commons.collections4.functors.[TruePredicate](http://docs.google.com/org/apache/commons/collections4/functors/TruePredicate.html)

Factory returning the singleton instance.

[truePredicate()](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html#truePredicate--) - Static method in class org.apache.commons.collections4.[PredicateUtils](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html)

Gets a Predicate that always returns true.

## U

[umodifiableListIterator(ListIterator<? extends E>)](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableListIterator.html#umodifiableListIterator-java.util.ListIterator-) - Static method in class org.apache.commons.collections4.iterators.[UnmodifiableListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableListIterator.html)

Decorates the specified iterator such that it cannot be modified.

[union(Iterable<? extends O>, Iterable<? extends O>)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#union-java.lang.Iterable-java.lang.Iterable-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Returns a [Collection](https://docs.oracle.com/javase/7/docs/api/java/util/Collection.html?is-external=true) containing the union of the given [Iterable](https://docs.oracle.com/javase/7/docs/api/java/lang/Iterable.html?is-external=true)s.

[union(List<? extends E>, List<? extends E>)](http://docs.google.com/org/apache/commons/collections4/ListUtils.html#union-java.util.List-java.util.List-) - Static method in class org.apache.commons.collections4.[ListUtils](http://docs.google.com/org/apache/commons/collections4/ListUtils.html)

Returns a new list containing the second list appended to the first list.

[union(Set<? extends E>, Set<? extends E>)](http://docs.google.com/org/apache/commons/collections4/SetUtils.html#union-java.util.Set-java.util.Set-) - Static method in class org.apache.commons.collections4.[SetUtils](http://docs.google.com/org/apache/commons/collections4/SetUtils.html)

Returns a unmodifiable **view** of the union of the given [Set](https://docs.oracle.com/javase/7/docs/api/java/util/Set.html?is-external=true)s.

[unique()](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html#unique--) - Method in class org.apache.commons.collections4.[FluentIterable](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html)

Returns a new FluentIterable whose iterator will return a unique view of this iterable.

[uniqueElements()](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.html#uniqueElements--) - Method in class org.apache.commons.collections4.multiset.[AbstractMapMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.html)   [uniqueElements()](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html#uniqueElements--) - Method in class org.apache.commons.collections4.multiset.[AbstractMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html)

Returns the number of unique elements in this multiset.

[UniqueFilterIterator](http://docs.google.com/org/apache/commons/collections4/iterators/UniqueFilterIterator.html)<[E](http://docs.google.com/org/apache/commons/collections4/iterators/UniqueFilterIterator.html)> - Class in [org.apache.commons.collections4.iterators](http://docs.google.com/org/apache/commons/collections4/iterators/package-summary.html)

A FilterIterator which only returns "unique" Objects.

[UniqueFilterIterator(Iterator<? extends E>)](http://docs.google.com/org/apache/commons/collections4/iterators/UniqueFilterIterator.html#UniqueFilterIterator-java.util.Iterator-) - Constructor for class org.apache.commons.collections4.iterators.[UniqueFilterIterator](http://docs.google.com/org/apache/commons/collections4/iterators/UniqueFilterIterator.html)

Constructs a new UniqueFilterIterator.

[uniqueIndexedCollection(Collection<C>, Transformer<C, K>)](http://docs.google.com/org/apache/commons/collections4/collection/IndexedCollection.html#uniqueIndexedCollection-java.util.Collection-org.apache.commons.collections4.Transformer-) - Static method in class org.apache.commons.collections4.collection.[IndexedCollection](http://docs.google.com/org/apache/commons/collections4/collection/IndexedCollection.html)

Create an [IndexedCollection](http://docs.google.com/org/apache/commons/collections4/collection/IndexedCollection.html) for a unique index.

[uniqueIterable(Iterable<E>)](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#uniqueIterable-java.lang.Iterable-) - Static method in class org.apache.commons.collections4.[IterableUtils](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html)

Returns a unique view of the given iterable.

[UniquePredicate](http://docs.google.com/org/apache/commons/collections4/functors/UniquePredicate.html)<[T](http://docs.google.com/org/apache/commons/collections4/functors/UniquePredicate.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Predicate implementation that returns true the first time an object is passed into the predicate.

[UniquePredicate()](http://docs.google.com/org/apache/commons/collections4/functors/UniquePredicate.html#UniquePredicate--) - Constructor for class org.apache.commons.collections4.functors.[UniquePredicate](http://docs.google.com/org/apache/commons/collections4/functors/UniquePredicate.html)

Constructor that performs no validation.

[uniquePredicate()](http://docs.google.com/org/apache/commons/collections4/functors/UniquePredicate.html#uniquePredicate--) - Static method in class org.apache.commons.collections4.functors.[UniquePredicate](http://docs.google.com/org/apache/commons/collections4/functors/UniquePredicate.html)

Factory to create the predicate.

[uniquePredicate()](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html#uniquePredicate--) - Static method in class org.apache.commons.collections4.[PredicateUtils](http://docs.google.com/org/apache/commons/collections4/PredicateUtils.html)

Creates a Predicate that returns true the first time an object is encountered, and false if the same object is received again.

[uniqueSet()](http://docs.google.com/org/apache/commons/collections4/bag/AbstractBagDecorator.html#uniqueSet--) - Method in class org.apache.commons.collections4.bag.[AbstractBagDecorator](http://docs.google.com/org/apache/commons/collections4/bag/AbstractBagDecorator.html)   [uniqueSet()](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html#uniqueSet--) - Method in class org.apache.commons.collections4.bag.[AbstractMapBag](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.html)

Returns an unmodifiable view of the underlying map's key set.

[uniqueSet()](http://docs.google.com/org/apache/commons/collections4/bag/PredicatedBag.html#uniqueSet--) - Method in class org.apache.commons.collections4.bag.[PredicatedBag](http://docs.google.com/org/apache/commons/collections4/bag/PredicatedBag.html)   [uniqueSet()](http://docs.google.com/org/apache/commons/collections4/bag/SynchronizedBag.html#uniqueSet--) - Method in class org.apache.commons.collections4.bag.[SynchronizedBag](http://docs.google.com/org/apache/commons/collections4/bag/SynchronizedBag.html)   [uniqueSet()](http://docs.google.com/org/apache/commons/collections4/bag/TransformedBag.html#uniqueSet--) - Method in class org.apache.commons.collections4.bag.[TransformedBag](http://docs.google.com/org/apache/commons/collections4/bag/TransformedBag.html)   [uniqueSet()](http://docs.google.com/org/apache/commons/collections4/Bag.html#uniqueSet--) - Method in interface org.apache.commons.collections4.[Bag](http://docs.google.com/org/apache/commons/collections4/Bag.html)

Returns a [Set](https://docs.oracle.com/javase/7/docs/api/java/util/Set.html?is-external=true) of unique elements in the Bag.

[uniqueSet()](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableBag.html#uniqueSet--) - Method in class org.apache.commons.collections4.bag.[UnmodifiableBag](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableBag.html)   [uniqueSet()](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableSortedBag.html#uniqueSet--) - Method in class org.apache.commons.collections4.bag.[UnmodifiableSortedBag](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableSortedBag.html)   [uniqueSet()](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html#uniqueSet--) - Method in class org.apache.commons.collections4.multiset.[AbstractMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.html)

Returns a view of the unique elements of this multiset.

[UniqueSet(AbstractMultiSet<E>)](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.UniqueSet.html#UniqueSet-org.apache.commons.collections4.multiset.AbstractMultiSet-) - Constructor for class org.apache.commons.collections4.multiset.[AbstractMultiSet.UniqueSet](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSet.UniqueSet.html)

Constructs a new unique element view of the MultiSet.

[uniqueSet()](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSetDecorator.html#uniqueSet--) - Method in class org.apache.commons.collections4.multiset.[AbstractMultiSetDecorator](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMultiSetDecorator.html)   [uniqueSet()](http://docs.google.com/org/apache/commons/collections4/multiset/PredicatedMultiSet.html#uniqueSet--) - Method in class org.apache.commons.collections4.multiset.[PredicatedMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/PredicatedMultiSet.html)   [uniqueSet()](http://docs.google.com/org/apache/commons/collections4/multiset/SynchronizedMultiSet.html#uniqueSet--) - Method in class org.apache.commons.collections4.multiset.[SynchronizedMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/SynchronizedMultiSet.html)   [uniqueSet()](http://docs.google.com/org/apache/commons/collections4/MultiSet.html#uniqueSet--) - Method in interface org.apache.commons.collections4.[MultiSet](http://docs.google.com/org/apache/commons/collections4/MultiSet.html)

Returns a [Set](https://docs.oracle.com/javase/7/docs/api/java/util/Set.html?is-external=true) of unique elements in the MultiSet.

[uniqueSet()](http://docs.google.com/org/apache/commons/collections4/multiset/UnmodifiableMultiSet.html#uniqueSet--) - Method in class org.apache.commons.collections4.multiset.[UnmodifiableMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/UnmodifiableMultiSet.html)   [UniqueSetIterator(Iterator<E>, AbstractMapMultiSet<E>)](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.UniqueSetIterator.html#UniqueSetIterator-java.util.Iterator-org.apache.commons.collections4.multiset.AbstractMapMultiSet-) - Constructor for class org.apache.commons.collections4.multiset.[AbstractMapMultiSet.UniqueSetIterator](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.UniqueSetIterator.html)

Constructor.

[unmodifiable()](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html#unmodifiable--) - Method in class org.apache.commons.collections4.[FluentIterable](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html)

Returns a new FluentIterable whose iterator will return an unmodifiable view of this iterable.

[Unmodifiable](http://docs.google.com/org/apache/commons/collections4/Unmodifiable.html) - Interface in [org.apache.commons.collections4](http://docs.google.com/org/apache/commons/collections4/package-summary.html)

Marker interface for collections, maps and iterators that are unmodifiable.

[UnmodifiableBag](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableBag.html)<[E](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableBag.html)> - Class in [org.apache.commons.collections4.bag](http://docs.google.com/org/apache/commons/collections4/bag/package-summary.html)

Decorates another [Bag](http://docs.google.com/org/apache/commons/collections4/Bag.html) to ensure it can't be altered.

[unmodifiableBag(Bag<? extends E>)](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableBag.html#unmodifiableBag-org.apache.commons.collections4.Bag-) - Static method in class org.apache.commons.collections4.bag.[UnmodifiableBag](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableBag.html)

Factory method to create an unmodifiable bag.

[unmodifiableBag(Bag<? extends E>)](http://docs.google.com/org/apache/commons/collections4/BagUtils.html#unmodifiableBag-org.apache.commons.collections4.Bag-) - Static method in class org.apache.commons.collections4.[BagUtils](http://docs.google.com/org/apache/commons/collections4/BagUtils.html)

Returns an unmodifiable view of the given bag.

[UnmodifiableBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableBidiMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableBidiMap.html),[V](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableBidiMap.html)> - Class in [org.apache.commons.collections4.bidimap](http://docs.google.com/org/apache/commons/collections4/bidimap/package-summary.html)

Decorates another [BidiMap](http://docs.google.com/org/apache/commons/collections4/BidiMap.html) to ensure it can't be altered.

[unmodifiableBidiMap(BidiMap<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableBidiMap.html#unmodifiableBidiMap-org.apache.commons.collections4.BidiMap-) - Static method in class org.apache.commons.collections4.bidimap.[UnmodifiableBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableBidiMap.html)

Factory method to create an unmodifiable map.

[UnmodifiableBoundedCollection](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableBoundedCollection.html)<[E](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableBoundedCollection.html)> - Class in [org.apache.commons.collections4.collection](http://docs.google.com/org/apache/commons/collections4/collection/package-summary.html)

[UnmodifiableBoundedCollection](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableBoundedCollection.html) decorates another [BoundedCollection](http://docs.google.com/org/apache/commons/collections4/BoundedCollection.html) to ensure it can't be altered.

[unmodifiableBoundedCollection(BoundedCollection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableBoundedCollection.html#unmodifiableBoundedCollection-org.apache.commons.collections4.BoundedCollection-) - Static method in class org.apache.commons.collections4.collection.[UnmodifiableBoundedCollection](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableBoundedCollection.html)

Factory method to create an unmodifiable bounded collection.

[unmodifiableBoundedCollection(Collection<? extends E>)](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableBoundedCollection.html#unmodifiableBoundedCollection-java.util.Collection-) - Static method in class org.apache.commons.collections4.collection.[UnmodifiableBoundedCollection](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableBoundedCollection.html)

Factory method to create an unmodifiable bounded collection.

[UnmodifiableCollection](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableCollection.html)<[E](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableCollection.html)> - Class in [org.apache.commons.collections4.collection](http://docs.google.com/org/apache/commons/collections4/collection/package-summary.html)

Decorates another [Collection](https://docs.oracle.com/javase/7/docs/api/java/util/Collection.html?is-external=true) to ensure it can't be altered.

[unmodifiableCollection(Collection<? extends T>)](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableCollection.html#unmodifiableCollection-java.util.Collection-) - Static method in class org.apache.commons.collections4.collection.[UnmodifiableCollection](http://docs.google.com/org/apache/commons/collections4/collection/UnmodifiableCollection.html)

Factory method to create an unmodifiable collection.

[unmodifiableCollection(Collection<? extends C>)](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html#unmodifiableCollection-java.util.Collection-) - Static method in class org.apache.commons.collections4.[CollectionUtils](http://docs.google.com/org/apache/commons/collections4/CollectionUtils.html)

Deprecated.

since 4.1, use [Collections.unmodifiableCollection(Collection)](https://docs.oracle.com/javase/7/docs/api/java/util/Collections.html?is-external=true#unmodifiableCollection-java.util.Collection-) instead

[UnmodifiableEntrySet](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableEntrySet.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableEntrySet.html),[V](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableEntrySet.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

Decorates a map entry Set to ensure it can't be altered.

[unmodifiableEntrySet(Set<Map.Entry<K, V>>)](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableEntrySet.html#unmodifiableEntrySet-java.util.Set-) - Static method in class org.apache.commons.collections4.map.[UnmodifiableEntrySet](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableEntrySet.html)

Factory method to create an unmodifiable set of Map Entry objects.

[unmodifiableIterable(Iterable<E>)](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#unmodifiableIterable-java.lang.Iterable-) - Static method in class org.apache.commons.collections4.[IterableUtils](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html)

Returns an unmodifiable view of the given iterable.

[UnmodifiableIterator](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableIterator.html)<[E](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableIterator.html)> - Class in [org.apache.commons.collections4.iterators](http://docs.google.com/org/apache/commons/collections4/iterators/package-summary.html)

Decorates an iterator such that it cannot be modified.

[unmodifiableIterator(Iterator<? extends E>)](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableIterator.html#unmodifiableIterator-java.util.Iterator-) - Static method in class org.apache.commons.collections4.iterators.[UnmodifiableIterator](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableIterator.html)

Decorates the specified iterator such that it cannot be modified.

[unmodifiableIterator(Iterator<E>)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#unmodifiableIterator-java.util.Iterator-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets an immutable version of an [Iterator](https://docs.oracle.com/javase/7/docs/api/java/util/Iterator.html?is-external=true).

[UnmodifiableList](http://docs.google.com/org/apache/commons/collections4/list/UnmodifiableList.html)<[E](http://docs.google.com/org/apache/commons/collections4/list/UnmodifiableList.html)> - Class in [org.apache.commons.collections4.list](http://docs.google.com/org/apache/commons/collections4/list/package-summary.html)

Decorates another List to ensure it can't be altered.

[UnmodifiableList(List<? extends E>)](http://docs.google.com/org/apache/commons/collections4/list/UnmodifiableList.html#UnmodifiableList-java.util.List-) - Constructor for class org.apache.commons.collections4.list.[UnmodifiableList](http://docs.google.com/org/apache/commons/collections4/list/UnmodifiableList.html)

Constructor that wraps (not copies).

[unmodifiableList(List<? extends E>)](http://docs.google.com/org/apache/commons/collections4/list/UnmodifiableList.html#unmodifiableList-java.util.List-) - Static method in class org.apache.commons.collections4.list.[UnmodifiableList](http://docs.google.com/org/apache/commons/collections4/list/UnmodifiableList.html)

Factory method to create an unmodifiable list.

[unmodifiableList(List<? extends E>)](http://docs.google.com/org/apache/commons/collections4/ListUtils.html#unmodifiableList-java.util.List-) - Static method in class org.apache.commons.collections4.[ListUtils](http://docs.google.com/org/apache/commons/collections4/ListUtils.html)

Returns an unmodifiable list backed by the given list.

[UnmodifiableListIterator](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableListIterator.html)<[E](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableListIterator.html)> - Class in [org.apache.commons.collections4.iterators](http://docs.google.com/org/apache/commons/collections4/iterators/package-summary.html)

Decorates a list iterator such that it cannot be modified.

[unmodifiableListIterator(ListIterator<E>)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#unmodifiableListIterator-java.util.ListIterator-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets an immutable version of a [ListIterator](https://docs.oracle.com/javase/7/docs/api/java/util/ListIterator.html?is-external=true).

[UnmodifiableMap](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableMap.html),[V](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableMap.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

Decorates another Map to ensure it can't be altered.

[unmodifiableMap(Map<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableMap.html#unmodifiableMap-java.util.Map-) - Static method in class org.apache.commons.collections4.map.[UnmodifiableMap](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableMap.html)

Factory method to create an unmodifiable map.

[unmodifiableMap(Map<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#unmodifiableMap-java.util.Map-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Returns an unmodifiable map backed by the given map.

[UnmodifiableMapEntry](http://docs.google.com/org/apache/commons/collections4/keyvalue/UnmodifiableMapEntry.html)<[K](http://docs.google.com/org/apache/commons/collections4/keyvalue/UnmodifiableMapEntry.html),[V](http://docs.google.com/org/apache/commons/collections4/keyvalue/UnmodifiableMapEntry.html)> - Class in [org.apache.commons.collections4.keyvalue](http://docs.google.com/org/apache/commons/collections4/keyvalue/package-summary.html)

A [Map.Entry](https://docs.oracle.com/javase/7/docs/api/java/util/Map.Entry.html?is-external=true) that throws UnsupportedOperationException when setValue is called.

[UnmodifiableMapEntry(K, V)](http://docs.google.com/org/apache/commons/collections4/keyvalue/UnmodifiableMapEntry.html#UnmodifiableMapEntry-K-V-) - Constructor for class org.apache.commons.collections4.keyvalue.[UnmodifiableMapEntry](http://docs.google.com/org/apache/commons/collections4/keyvalue/UnmodifiableMapEntry.html)

Constructs a new entry with the specified key and given value.

[UnmodifiableMapEntry(KeyValue<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/keyvalue/UnmodifiableMapEntry.html#UnmodifiableMapEntry-org.apache.commons.collections4.KeyValue-) - Constructor for class org.apache.commons.collections4.keyvalue.[UnmodifiableMapEntry](http://docs.google.com/org/apache/commons/collections4/keyvalue/UnmodifiableMapEntry.html)

Constructs a new entry from the specified KeyValue.

[UnmodifiableMapEntry(Map.Entry<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/keyvalue/UnmodifiableMapEntry.html#UnmodifiableMapEntry-java.util.Map.Entry-) - Constructor for class org.apache.commons.collections4.keyvalue.[UnmodifiableMapEntry](http://docs.google.com/org/apache/commons/collections4/keyvalue/UnmodifiableMapEntry.html)

Constructs a new entry from the specified Map.Entry.

[UnmodifiableMapIterator](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableMapIterator.html)<[K](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableMapIterator.html),[V](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableMapIterator.html)> - Class in [org.apache.commons.collections4.iterators](http://docs.google.com/org/apache/commons/collections4/iterators/package-summary.html)

Decorates a map iterator such that it cannot be modified.

[unmodifiableMapIterator(MapIterator<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableMapIterator.html#unmodifiableMapIterator-org.apache.commons.collections4.MapIterator-) - Static method in class org.apache.commons.collections4.iterators.[UnmodifiableMapIterator](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableMapIterator.html)

Decorates the specified iterator such that it cannot be modified.

[unmodifiableMapIterator(MapIterator<K, V>)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#unmodifiableMapIterator-org.apache.commons.collections4.MapIterator-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Gets an immutable version of a [MapIterator](http://docs.google.com/org/apache/commons/collections4/MapIterator.html).

[UnmodifiableMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/UnmodifiableMultiSet.html)<[E](http://docs.google.com/org/apache/commons/collections4/multiset/UnmodifiableMultiSet.html)> - Class in [org.apache.commons.collections4.multiset](http://docs.google.com/org/apache/commons/collections4/multiset/package-summary.html)

Decorates another [MultiSet](http://docs.google.com/org/apache/commons/collections4/MultiSet.html) to ensure it can't be altered.

[unmodifiableMultiSet(MultiSet<? extends E>)](http://docs.google.com/org/apache/commons/collections4/multiset/UnmodifiableMultiSet.html#unmodifiableMultiSet-org.apache.commons.collections4.MultiSet-) - Static method in class org.apache.commons.collections4.multiset.[UnmodifiableMultiSet](http://docs.google.com/org/apache/commons/collections4/multiset/UnmodifiableMultiSet.html)

Factory method to create an unmodifiable multiset.

[unmodifiableMultiSet(MultiSet<? extends E>)](http://docs.google.com/org/apache/commons/collections4/MultiSetUtils.html#unmodifiableMultiSet-org.apache.commons.collections4.MultiSet-) - Static method in class org.apache.commons.collections4.[MultiSetUtils](http://docs.google.com/org/apache/commons/collections4/MultiSetUtils.html)

Returns an unmodifiable view of the given multiset.

[UnmodifiableMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/UnmodifiableMultiValuedMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/multimap/UnmodifiableMultiValuedMap.html),[V](http://docs.google.com/org/apache/commons/collections4/multimap/UnmodifiableMultiValuedMap.html)> - Class in [org.apache.commons.collections4.multimap](http://docs.google.com/org/apache/commons/collections4/multimap/package-summary.html)

Decorates another [MultiValuedMap](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html) to ensure it can't be altered.

[unmodifiableMultiValuedMap(MultiValuedMap<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/multimap/UnmodifiableMultiValuedMap.html#unmodifiableMultiValuedMap-org.apache.commons.collections4.MultiValuedMap-) - Static method in class org.apache.commons.collections4.multimap.[UnmodifiableMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/UnmodifiableMultiValuedMap.html)

Factory method to create an unmodifiable MultiValuedMap.

[unmodifiableMultiValuedMap(MultiValuedMap<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/MultiMapUtils.html#unmodifiableMultiValuedMap-org.apache.commons.collections4.MultiValuedMap-) - Static method in class org.apache.commons.collections4.[MultiMapUtils](http://docs.google.com/org/apache/commons/collections4/MultiMapUtils.html)

Returns an UnmodifiableMultiValuedMap backed by the given map.

[UnmodifiableNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableNavigableSet.html)<[E](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableNavigableSet.html)> - Class in [org.apache.commons.collections4.set](http://docs.google.com/org/apache/commons/collections4/set/package-summary.html)

Decorates another NavigableSet to ensure it can't be altered.

[unmodifiableNavigableSet(NavigableSet<E>)](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableNavigableSet.html#unmodifiableNavigableSet-java.util.NavigableSet-) - Static method in class org.apache.commons.collections4.set.[UnmodifiableNavigableSet](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableNavigableSet.html)

Factory method to create an unmodifiable set.

[unmodifiableNavigableSet(NavigableSet<E>)](http://docs.google.com/org/apache/commons/collections4/SetUtils.html#unmodifiableNavigableSet-java.util.NavigableSet-) - Static method in class org.apache.commons.collections4.[SetUtils](http://docs.google.com/org/apache/commons/collections4/SetUtils.html)

Returns an unmodifiable navigable set backed by the given navigable set.

[UnmodifiableOrderedBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableOrderedBidiMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableOrderedBidiMap.html),[V](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableOrderedBidiMap.html)> - Class in [org.apache.commons.collections4.bidimap](http://docs.google.com/org/apache/commons/collections4/bidimap/package-summary.html)

Decorates another [OrderedBidiMap](http://docs.google.com/org/apache/commons/collections4/OrderedBidiMap.html) to ensure it can't be altered.

[unmodifiableOrderedBidiMap(OrderedBidiMap<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableOrderedBidiMap.html#unmodifiableOrderedBidiMap-org.apache.commons.collections4.OrderedBidiMap-) - Static method in class org.apache.commons.collections4.bidimap.[UnmodifiableOrderedBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableOrderedBidiMap.html)

Factory method to create an unmodifiable map.

[UnmodifiableOrderedMap](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableOrderedMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableOrderedMap.html),[V](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableOrderedMap.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

Decorates another OrderedMap to ensure it can't be altered.

[unmodifiableOrderedMap(OrderedMap<? extends K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableOrderedMap.html#unmodifiableOrderedMap-org.apache.commons.collections4.OrderedMap-) - Static method in class org.apache.commons.collections4.map.[UnmodifiableOrderedMap](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableOrderedMap.html)

Factory method to create an unmodifiable sorted map.

[UnmodifiableOrderedMapIterator](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableOrderedMapIterator.html)<[K](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableOrderedMapIterator.html),[V](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableOrderedMapIterator.html)> - Class in [org.apache.commons.collections4.iterators](http://docs.google.com/org/apache/commons/collections4/iterators/package-summary.html)

Decorates an ordered map iterator such that it cannot be modified.

[unmodifiableOrderedMapIterator(OrderedMapIterator<K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableOrderedMapIterator.html#unmodifiableOrderedMapIterator-org.apache.commons.collections4.OrderedMapIterator-) - Static method in class org.apache.commons.collections4.iterators.[UnmodifiableOrderedMapIterator](http://docs.google.com/org/apache/commons/collections4/iterators/UnmodifiableOrderedMapIterator.html)

Decorates the specified iterator such that it cannot be modified.

[UnmodifiableQueue](http://docs.google.com/org/apache/commons/collections4/queue/UnmodifiableQueue.html)<[E](http://docs.google.com/org/apache/commons/collections4/queue/UnmodifiableQueue.html)> - Class in [org.apache.commons.collections4.queue](http://docs.google.com/org/apache/commons/collections4/queue/package-summary.html)

Decorates another [Queue](https://docs.oracle.com/javase/7/docs/api/java/util/Queue.html?is-external=true) to ensure it can't be altered.

[unmodifiableQueue(Queue<? extends E>)](http://docs.google.com/org/apache/commons/collections4/queue/UnmodifiableQueue.html#unmodifiableQueue-java.util.Queue-) - Static method in class org.apache.commons.collections4.queue.[UnmodifiableQueue](http://docs.google.com/org/apache/commons/collections4/queue/UnmodifiableQueue.html)

Factory method to create an unmodifiable queue.

[unmodifiableQueue(Queue<? extends E>)](http://docs.google.com/org/apache/commons/collections4/QueueUtils.html#unmodifiableQueue-java.util.Queue-) - Static method in class org.apache.commons.collections4.[QueueUtils](http://docs.google.com/org/apache/commons/collections4/QueueUtils.html)

Returns an unmodifiable queue backed by the given queue.

[UnmodifiableSet](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableSet.html)<[E](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableSet.html)> - Class in [org.apache.commons.collections4.set](http://docs.google.com/org/apache/commons/collections4/set/package-summary.html)

Decorates another Set to ensure it can't be altered.

[unmodifiableSet(Set<? extends E>)](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableSet.html#unmodifiableSet-java.util.Set-) - Static method in class org.apache.commons.collections4.set.[UnmodifiableSet](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableSet.html)

Factory method to create an unmodifiable set.

[unmodifiableSet(E...)](http://docs.google.com/org/apache/commons/collections4/SetUtils.html#unmodifiableSet-E...-) - Static method in class org.apache.commons.collections4.[SetUtils](http://docs.google.com/org/apache/commons/collections4/SetUtils.html)

Creates an unmodifiable set from the given items.

[unmodifiableSet(Set<? extends E>)](http://docs.google.com/org/apache/commons/collections4/SetUtils.html#unmodifiableSet-java.util.Set-) - Static method in class org.apache.commons.collections4.[SetUtils](http://docs.google.com/org/apache/commons/collections4/SetUtils.html)

Returns an unmodifiable set backed by the given set.

[UnmodifiableSortedBag](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableSortedBag.html)<[E](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableSortedBag.html)> - Class in [org.apache.commons.collections4.bag](http://docs.google.com/org/apache/commons/collections4/bag/package-summary.html)

Decorates another [SortedBag](http://docs.google.com/org/apache/commons/collections4/SortedBag.html) to ensure it can't be altered.

[unmodifiableSortedBag(SortedBag<E>)](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableSortedBag.html#unmodifiableSortedBag-org.apache.commons.collections4.SortedBag-) - Static method in class org.apache.commons.collections4.bag.[UnmodifiableSortedBag](http://docs.google.com/org/apache/commons/collections4/bag/UnmodifiableSortedBag.html)

Factory method to create an unmodifiable bag.

[unmodifiableSortedBag(SortedBag<E>)](http://docs.google.com/org/apache/commons/collections4/BagUtils.html#unmodifiableSortedBag-org.apache.commons.collections4.SortedBag-) - Static method in class org.apache.commons.collections4.[BagUtils](http://docs.google.com/org/apache/commons/collections4/BagUtils.html)

Returns an unmodifiable view of the given sorted bag.

[UnmodifiableSortedBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableSortedBidiMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableSortedBidiMap.html),[V](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableSortedBidiMap.html)> - Class in [org.apache.commons.collections4.bidimap](http://docs.google.com/org/apache/commons/collections4/bidimap/package-summary.html)

Decorates another [SortedBidiMap](http://docs.google.com/org/apache/commons/collections4/SortedBidiMap.html) to ensure it can't be altered.

[unmodifiableSortedBidiMap(SortedBidiMap<K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableSortedBidiMap.html#unmodifiableSortedBidiMap-org.apache.commons.collections4.SortedBidiMap-) - Static method in class org.apache.commons.collections4.bidimap.[UnmodifiableSortedBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableSortedBidiMap.html)

Factory method to create an unmodifiable map.

[UnmodifiableSortedMap](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableSortedMap.html)<[K](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableSortedMap.html),[V](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableSortedMap.html)> - Class in [org.apache.commons.collections4.map](http://docs.google.com/org/apache/commons/collections4/map/package-summary.html)

Decorates another SortedMap to ensure it can't be altered.

[unmodifiableSortedMap(SortedMap<K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableSortedMap.html#unmodifiableSortedMap-java.util.SortedMap-) - Static method in class org.apache.commons.collections4.map.[UnmodifiableSortedMap](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableSortedMap.html)

Factory method to create an unmodifiable sorted map.

[unmodifiableSortedMap(SortedMap<K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#unmodifiableSortedMap-java.util.SortedMap-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Returns an unmodifiable sorted map backed by the given sorted map.

[UnmodifiableSortedSet](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableSortedSet.html)<[E](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableSortedSet.html)> - Class in [org.apache.commons.collections4.set](http://docs.google.com/org/apache/commons/collections4/set/package-summary.html)

Decorates another SortedSet to ensure it can't be altered.

[unmodifiableSortedSet(SortedSet<E>)](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableSortedSet.html#unmodifiableSortedSet-java.util.SortedSet-) - Static method in class org.apache.commons.collections4.set.[UnmodifiableSortedSet](http://docs.google.com/org/apache/commons/collections4/set/UnmodifiableSortedSet.html)

Factory method to create an unmodifiable set.

[unmodifiableSortedSet(SortedSet<E>)](http://docs.google.com/org/apache/commons/collections4/SetUtils.html#unmodifiableSortedSet-java.util.SortedSet-) - Static method in class org.apache.commons.collections4.[SetUtils](http://docs.google.com/org/apache/commons/collections4/SetUtils.html)

Returns an unmodifiable sorted set backed by the given sorted set.

[UnmodifiableTrie](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html)<[K](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html),[V](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html)> - Class in [org.apache.commons.collections4.trie](http://docs.google.com/org/apache/commons/collections4/trie/package-summary.html)

An unmodifiable [Trie](http://docs.google.com/org/apache/commons/collections4/Trie.html).

[UnmodifiableTrie(Trie<K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html#UnmodifiableTrie-org.apache.commons.collections4.Trie-) - Constructor for class org.apache.commons.collections4.trie.[UnmodifiableTrie](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html)

Constructor that wraps (not copies).

[unmodifiableTrie(Trie<K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html#unmodifiableTrie-org.apache.commons.collections4.Trie-) - Static method in class org.apache.commons.collections4.trie.[UnmodifiableTrie](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html)

Factory method to create a unmodifiable trie.

[unmodifiableTrie(Trie<K, ? extends V>)](http://docs.google.com/org/apache/commons/collections4/TrieUtils.html#unmodifiableTrie-org.apache.commons.collections4.Trie-) - Static method in class org.apache.commons.collections4.[TrieUtils](http://docs.google.com/org/apache/commons/collections4/TrieUtils.html)

Returns an unmodifiable instance of a [Trie](http://docs.google.com/org/apache/commons/collections4/Trie.html)

[unregisterCursor(CursorableLinkedList.Cursor<E>)](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.html#unregisterCursor-org.apache.commons.collections4.list.CursorableLinkedList.Cursor-) - Method in class org.apache.commons.collections4.list.[CursorableLinkedList](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.html)

Deregisters a cursor from the list to be notified of changes.

[updateCurrentIterator()](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorChain.html#updateCurrentIterator--) - Method in class org.apache.commons.collections4.iterators.[IteratorChain](http://docs.google.com/org/apache/commons/collections4/iterators/IteratorChain.html)

Updates the current iterator field to ensure that the current Iterator is not exhausted

[updateCurrentIterator()](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectGraphIterator.html#updateCurrentIterator--) - Method in class org.apache.commons.collections4.iterators.[ObjectGraphIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ObjectGraphIterator.html)

Loops around the iterators to find the next value to return.

[updateEntry(AbstractHashedMap.HashEntry<K, V>, V)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#updateEntry-org.apache.commons.collections4.map.AbstractHashedMap.HashEntry-V-) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Updates an existing key-value mapping to change the value.

[updateEntry(AbstractHashedMap.HashEntry<K, V>, V)](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html#updateEntry-org.apache.commons.collections4.map.AbstractHashedMap.HashEntry-V-) - Method in class org.apache.commons.collections4.map.[LRUMap](http://docs.google.com/org/apache/commons/collections4/map/LRUMap.html)

Updates an existing key-value mapping.

[updateNode(AbstractLinkedList.Node<E>, E)](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html#updateNode-org.apache.commons.collections4.list.AbstractLinkedList.Node-E-) - Method in class org.apache.commons.collections4.list.[AbstractLinkedList](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.html)

Updates the node with a new value.

[updateNode(AbstractLinkedList.Node<E>, E)](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.html#updateNode-org.apache.commons.collections4.list.AbstractLinkedList.Node-E-) - Method in class org.apache.commons.collections4.list.[CursorableLinkedList](http://docs.google.com/org/apache/commons/collections4/list/CursorableLinkedList.html)

Updates the node with a new value.

## V

[validate(E)](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.html#validate-E-) - Method in class org.apache.commons.collections4.collection.[PredicatedCollection](http://docs.google.com/org/apache/commons/collections4/collection/PredicatedCollection.html)

Validates the object being added to ensure it matches the predicate.

[validate(K, V)](http://docs.google.com/org/apache/commons/collections4/map/PredicatedMap.html#validate-K-V-) - Method in class org.apache.commons.collections4.map.[PredicatedMap](http://docs.google.com/org/apache/commons/collections4/map/PredicatedMap.html)

Validates a key value pair.

[value](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.MutableInteger.html#value) - Variable in class org.apache.commons.collections4.bag.[AbstractMapBag.MutableInteger](http://docs.google.com/org/apache/commons/collections4/bag/AbstractMapBag.MutableInteger.html)

The value of this mutable.

[value](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.Node.html#value) - Variable in class org.apache.commons.collections4.list.[AbstractLinkedList.Node](http://docs.google.com/org/apache/commons/collections4/list/AbstractLinkedList.Node.html)

The object contained within this node

[value](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html#value) - Variable in class org.apache.commons.collections4.map.[AbstractHashedMap.HashEntry](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.HashEntry.html)

The value

[value](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceStrength.html#value) - Variable in enum org.apache.commons.collections4.map.[AbstractReferenceMap.ReferenceStrength](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceStrength.html)

value

[value](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.MutableInteger.html#value) - Variable in class org.apache.commons.collections4.multiset.[AbstractMapMultiSet.MutableInteger](http://docs.google.com/org/apache/commons/collections4/multiset/AbstractMapMultiSet.MutableInteger.html)

The value of this mutable.

[valueComparator()](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractSortedBidiMapDecorator.html#valueComparator--) - Method in class org.apache.commons.collections4.bidimap.[AbstractSortedBidiMapDecorator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractSortedBidiMapDecorator.html)   [valueComparator()](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.html#valueComparator--) - Method in class org.apache.commons.collections4.bidimap.[DualTreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.html)   [valueComparator()](http://docs.google.com/org/apache/commons/collections4/SortedBidiMap.html#valueComparator--) - Method in interface org.apache.commons.collections4.[SortedBidiMap](http://docs.google.com/org/apache/commons/collections4/SortedBidiMap.html)

Get the comparator used for the values in the value-to-key map aspect.

[valueList()](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html#valueList--) - Method in class org.apache.commons.collections4.map.[ListOrderedMap](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html)

Gets a view over the values in the map as a List.

[valueOf(String)](http://docs.google.com/org/apache/commons/collections4/comparators/FixedOrderComparator.UnknownObjectBehavior.html#valueOf-java.lang.String-) - Static method in enum org.apache.commons.collections4.comparators.[FixedOrderComparator.UnknownObjectBehavior](http://docs.google.com/org/apache/commons/collections4/comparators/FixedOrderComparator.UnknownObjectBehavior.html)

Returns the enum constant of this type with the specified name.

[valueOf(String)](http://docs.google.com/org/apache/commons/collections4/functors/ComparatorPredicate.Criterion.html#valueOf-java.lang.String-) - Static method in enum org.apache.commons.collections4.functors.[ComparatorPredicate.Criterion](http://docs.google.com/org/apache/commons/collections4/functors/ComparatorPredicate.Criterion.html)

Returns the enum constant of this type with the specified name.

[valueOf(String)](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceStrength.html#valueOf-java.lang.String-) - Static method in enum org.apache.commons.collections4.map.[AbstractReferenceMap.ReferenceStrength](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceStrength.html)

Returns the enum constant of this type with the specified name.

[valuePredicate](http://docs.google.com/org/apache/commons/collections4/map/PredicatedMap.html#valuePredicate) - Variable in class org.apache.commons.collections4.map.[PredicatedMap](http://docs.google.com/org/apache/commons/collections4/map/PredicatedMap.html)

The value predicate to use

[values()](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractBidiMapDecorator.html#values--) - Method in class org.apache.commons.collections4.bidimap.[AbstractBidiMapDecorator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractBidiMapDecorator.html)   [values()](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html#values--) - Method in class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.html)

Gets a values view of the map.

[Values(AbstractDualBidiMap<?, V>)](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.Values.html#Values-org.apache.commons.collections4.bidimap.AbstractDualBidiMap-) - Constructor for class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.Values](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.Values.html)

Constructs a new view of the BidiMap.

[values()](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html#values--) - Method in class org.apache.commons.collections4.bidimap.[TreeBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/TreeBidiMap.html)

Returns a set view of the values contained in this map in key order.

[values()](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableBidiMap.html#values--) - Method in class org.apache.commons.collections4.bidimap.[UnmodifiableBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableBidiMap.html)   [values()](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableOrderedBidiMap.html#values--) - Method in class org.apache.commons.collections4.bidimap.[UnmodifiableOrderedBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableOrderedBidiMap.html)   [values()](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableSortedBidiMap.html#values--) - Method in class org.apache.commons.collections4.bidimap.[UnmodifiableSortedBidiMap](http://docs.google.com/org/apache/commons/collections4/bidimap/UnmodifiableSortedBidiMap.html)   [values()](http://docs.google.com/org/apache/commons/collections4/BidiMap.html#values--) - Method in interface org.apache.commons.collections4.[BidiMap](http://docs.google.com/org/apache/commons/collections4/BidiMap.html)

Returns a [Set](https://docs.oracle.com/javase/7/docs/api/java/util/Set.html?is-external=true) view of the values contained in this map.

[values(K)](http://docs.google.com/org/apache/commons/collections4/collection/IndexedCollection.html#values-K-) - Method in class org.apache.commons.collections4.collection.[IndexedCollection](http://docs.google.com/org/apache/commons/collections4/collection/IndexedCollection.html)

Get all elements associated with the given key.

[values()](http://docs.google.com/org/apache/commons/collections4/comparators/FixedOrderComparator.UnknownObjectBehavior.html#values--) - Static method in enum org.apache.commons.collections4.comparators.[FixedOrderComparator.UnknownObjectBehavior](http://docs.google.com/org/apache/commons/collections4/comparators/FixedOrderComparator.UnknownObjectBehavior.html)

Returns an array containing the constants of this enum type, in the order they are declared.

[values()](http://docs.google.com/org/apache/commons/collections4/functors/ComparatorPredicate.Criterion.html#values--) - Static method in enum org.apache.commons.collections4.functors.[ComparatorPredicate.Criterion](http://docs.google.com/org/apache/commons/collections4/functors/ComparatorPredicate.Criterion.html)

Returns an array containing the constants of this enum type, in the order they are declared.

[values()](http://docs.google.com/org/apache/commons/collections4/Get.html#values--) - Method in interface org.apache.commons.collections4.[Get](http://docs.google.com/org/apache/commons/collections4/Get.html)   [values()](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html#values--) - Method in class org.apache.commons.collections4.map.[AbstractHashedMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.html)

Gets the values view of the map.

[Values(AbstractHashedMap<?, V>)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.Values.html#Values-org.apache.commons.collections4.map.AbstractHashedMap-) - Constructor for class org.apache.commons.collections4.map.[AbstractHashedMap.Values](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.Values.html)   [values()](http://docs.google.com/org/apache/commons/collections4/map/AbstractMapDecorator.html#values--) - Method in class org.apache.commons.collections4.map.[AbstractMapDecorator](http://docs.google.com/org/apache/commons/collections4/map/AbstractMapDecorator.html)   [values()](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceStrength.html#values--) - Static method in enum org.apache.commons.collections4.map.[AbstractReferenceMap.ReferenceStrength](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.ReferenceStrength.html)

Returns an array containing the constants of this enum type, in the order they are declared.

[values()](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html#values--) - Method in class org.apache.commons.collections4.map.[AbstractReferenceMap](http://docs.google.com/org/apache/commons/collections4/map/AbstractReferenceMap.html)

Returns a collection view of this map's values.

[values()](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html#values--) - Method in class org.apache.commons.collections4.map.[CompositeMap](http://docs.google.com/org/apache/commons/collections4/map/CompositeMap.html)

Returns a collection view of the values contained in this map.

[values()](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeMap.html#values--) - Method in class org.apache.commons.collections4.map.[FixedSizeMap](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeMap.html)   [values()](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeSortedMap.html#values--) - Method in class org.apache.commons.collections4.map.[FixedSizeSortedMap](http://docs.google.com/org/apache/commons/collections4/map/FixedSizeSortedMap.html)   [values()](http://docs.google.com/org/apache/commons/collections4/map/Flat3Map.html#values--) - Method in class org.apache.commons.collections4.map.[Flat3Map](http://docs.google.com/org/apache/commons/collections4/map/Flat3Map.html)

Gets the values view of the map.

[values()](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html#values--) - Method in class org.apache.commons.collections4.map.[ListOrderedMap](http://docs.google.com/org/apache/commons/collections4/map/ListOrderedMap.html)

Gets a view over the values in the map.

[values()](http://docs.google.com/org/apache/commons/collections4/map/MultiValueMap.html#values--) - Method in class org.apache.commons.collections4.map.[MultiValueMap](http://docs.google.com/org/apache/commons/collections4/map/MultiValueMap.html)

Deprecated.

Gets a collection containing all the values in the map.

[values()](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.html#values--) - Method in class org.apache.commons.collections4.map.[PassiveExpiringMap](http://docs.google.com/org/apache/commons/collections4/map/PassiveExpiringMap.html)

All expired entries are removed from the map prior to returning the value collection.

[values()](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html#values--) - Method in class org.apache.commons.collections4.map.[SingletonMap](http://docs.google.com/org/apache/commons/collections4/map/SingletonMap.html)

Gets the unmodifiable values view of the map.

[values()](http://docs.google.com/org/apache/commons/collections4/map/StaticBucketMap.html#values--) - Method in class org.apache.commons.collections4.map.[StaticBucketMap](http://docs.google.com/org/apache/commons/collections4/map/StaticBucketMap.html)

Gets the values.

[values()](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableMap.html#values--) - Method in class org.apache.commons.collections4.map.[UnmodifiableMap](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableMap.html)   [values()](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableOrderedMap.html#values--) - Method in class org.apache.commons.collections4.map.[UnmodifiableOrderedMap](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableOrderedMap.html)   [values()](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableSortedMap.html#values--) - Method in class org.apache.commons.collections4.map.[UnmodifiableSortedMap](http://docs.google.com/org/apache/commons/collections4/map/UnmodifiableSortedMap.html)   [values()](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html#values--) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMap.html)

Gets a collection containing all the values in the map.

[values()](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html#values--) - Method in class org.apache.commons.collections4.multimap.[AbstractMultiValuedMapDecorator](http://docs.google.com/org/apache/commons/collections4/multimap/AbstractMultiValuedMapDecorator.html)   [values()](http://docs.google.com/org/apache/commons/collections4/multimap/UnmodifiableMultiValuedMap.html#values--) - Method in class org.apache.commons.collections4.multimap.[UnmodifiableMultiValuedMap](http://docs.google.com/org/apache/commons/collections4/multimap/UnmodifiableMultiValuedMap.html)   [values()](http://docs.google.com/org/apache/commons/collections4/MultiMap.html#values--) - Method in interface org.apache.commons.collections4.[MultiMap](http://docs.google.com/org/apache/commons/collections4/MultiMap.html)

Deprecated.

Gets a collection containing all the values in the map.

[values()](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html#values--) - Method in interface org.apache.commons.collections4.[MultiValuedMap](http://docs.google.com/org/apache/commons/collections4/MultiValuedMap.html)

Gets a [Collection](https://docs.oracle.com/javase/7/docs/api/java/util/Collection.html?is-external=true) view of all values contained in this multi-valued map.

[values()](http://docs.google.com/org/apache/commons/collections4/splitmap/AbstractIterableGetMapDecorator.html#values--) - Method in class org.apache.commons.collections4.splitmap.[AbstractIterableGetMapDecorator](http://docs.google.com/org/apache/commons/collections4/splitmap/AbstractIterableGetMapDecorator.html)   [values()](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html#values--) - Method in class org.apache.commons.collections4.trie.[UnmodifiableTrie](http://docs.google.com/org/apache/commons/collections4/trie/UnmodifiableTrie.html)   [ValuesIterator(Iterator<V>, AbstractDualBidiMap<?, V>)](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.ValuesIterator.html#ValuesIterator-java.util.Iterator-org.apache.commons.collections4.bidimap.AbstractDualBidiMap-) - Constructor for class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.ValuesIterator](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.ValuesIterator.html)

Constructor.

[ValuesIterator(AbstractHashedMap<?, V>)](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.ValuesIterator.html#ValuesIterator-org.apache.commons.collections4.map.AbstractHashedMap-) - Constructor for class org.apache.commons.collections4.map.[AbstractHashedMap.ValuesIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractHashedMap.ValuesIterator.html)   [ValuesIterator(AbstractLinkedMap<?, V>)](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.ValuesIterator.html#ValuesIterator-org.apache.commons.collections4.map.AbstractLinkedMap-) - Constructor for class org.apache.commons.collections4.map.[AbstractLinkedMap.ValuesIterator](http://docs.google.com/org/apache/commons/collections4/map/AbstractLinkedMap.ValuesIterator.html)   [valueTransformer](http://docs.google.com/org/apache/commons/collections4/map/TransformedMap.html#valueTransformer) - Variable in class org.apache.commons.collections4.map.[TransformedMap](http://docs.google.com/org/apache/commons/collections4/map/TransformedMap.html)

The transformer to use for the value

[verbosePrint(PrintStream, Object, Map<?, ?>)](http://docs.google.com/org/apache/commons/collections4/MapUtils.html#verbosePrint-java.io.PrintStream-java.lang.Object-java.util.Map-) - Static method in class org.apache.commons.collections4.[MapUtils](http://docs.google.com/org/apache/commons/collections4/MapUtils.html)

Prints the given map with nice line breaks.

[View(Collection<E>, AbstractDualBidiMap<K, V>)](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.View.html#View-java.util.Collection-org.apache.commons.collections4.bidimap.AbstractDualBidiMap-) - Constructor for class org.apache.commons.collections4.bidimap.[AbstractDualBidiMap.View](http://docs.google.com/org/apache/commons/collections4/bidimap/AbstractDualBidiMap.View.html)

Constructs a new view of the BidiMap.

[ViewMap(DualTreeBidiMap<K, V>, SortedMap<K, V>)](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.ViewMap.html#ViewMap-org.apache.commons.collections4.bidimap.DualTreeBidiMap-java.util.SortedMap-) - Constructor for class org.apache.commons.collections4.bidimap.[DualTreeBidiMap.ViewMap](http://docs.google.com/org/apache/commons/collections4/bidimap/DualTreeBidiMap.ViewMap.html)

Constructor.

[visit(CommandVisitor<T>)](http://docs.google.com/org/apache/commons/collections4/sequence/EditScript.html#visit-org.apache.commons.collections4.sequence.CommandVisitor-) - Method in class org.apache.commons.collections4.sequence.[EditScript](http://docs.google.com/org/apache/commons/collections4/sequence/EditScript.html)

Visit the script.

[visitDeleteCommand(T)](http://docs.google.com/org/apache/commons/collections4/sequence/CommandVisitor.html#visitDeleteCommand-T-) - Method in interface org.apache.commons.collections4.sequence.[CommandVisitor](http://docs.google.com/org/apache/commons/collections4/sequence/CommandVisitor.html)

Method called when a delete command is encountered.

[visitDeleteCommand(T)](http://docs.google.com/org/apache/commons/collections4/sequence/ReplacementsFinder.html#visitDeleteCommand-T-) - Method in class org.apache.commons.collections4.sequence.[ReplacementsFinder](http://docs.google.com/org/apache/commons/collections4/sequence/ReplacementsFinder.html)

Add an object to the pending deletions set.

[visitInsertCommand(T)](http://docs.google.com/org/apache/commons/collections4/sequence/CommandVisitor.html#visitInsertCommand-T-) - Method in interface org.apache.commons.collections4.sequence.[CommandVisitor](http://docs.google.com/org/apache/commons/collections4/sequence/CommandVisitor.html)

Method called when an insert command is encountered.

[visitInsertCommand(T)](http://docs.google.com/org/apache/commons/collections4/sequence/ReplacementsFinder.html#visitInsertCommand-T-) - Method in class org.apache.commons.collections4.sequence.[ReplacementsFinder](http://docs.google.com/org/apache/commons/collections4/sequence/ReplacementsFinder.html)

Add an object to the pending insertions set.

[visitKeepCommand(T)](http://docs.google.com/org/apache/commons/collections4/sequence/CommandVisitor.html#visitKeepCommand-T-) - Method in interface org.apache.commons.collections4.sequence.[CommandVisitor](http://docs.google.com/org/apache/commons/collections4/sequence/CommandVisitor.html)

Method called when a keep command is encountered.

[visitKeepCommand(T)](http://docs.google.com/org/apache/commons/collections4/sequence/ReplacementsFinder.html#visitKeepCommand-T-) - Method in class org.apache.commons.collections4.sequence.[ReplacementsFinder](http://docs.google.com/org/apache/commons/collections4/sequence/ReplacementsFinder.html)

Handle a synchronization object.

## W

[whileClosure(Predicate<? super E>, Closure<? super E>)](http://docs.google.com/org/apache/commons/collections4/ClosureUtils.html#whileClosure-org.apache.commons.collections4.Predicate-org.apache.commons.collections4.Closure-) - Static method in class org.apache.commons.collections4.[ClosureUtils](http://docs.google.com/org/apache/commons/collections4/ClosureUtils.html)

Creates a Closure that will call the closure repeatedly until the predicate returns false.

[WhileClosure](http://docs.google.com/org/apache/commons/collections4/functors/WhileClosure.html)<[E](http://docs.google.com/org/apache/commons/collections4/functors/WhileClosure.html)> - Class in [org.apache.commons.collections4.functors](http://docs.google.com/org/apache/commons/collections4/functors/package-summary.html)

Closure implementation that executes a closure repeatedly until a condition is met, like a do-while or while loop.

[WhileClosure(Predicate<? super E>, Closure<? super E>, boolean)](http://docs.google.com/org/apache/commons/collections4/functors/WhileClosure.html#WhileClosure-org.apache.commons.collections4.Predicate-org.apache.commons.collections4.Closure-boolean-) - Constructor for class org.apache.commons.collections4.functors.[WhileClosure](http://docs.google.com/org/apache/commons/collections4/functors/WhileClosure.html)

Constructor that performs no validation.

[whileClosure(Predicate<? super E>, Closure<? super E>, boolean)](http://docs.google.com/org/apache/commons/collections4/functors/WhileClosure.html#whileClosure-org.apache.commons.collections4.Predicate-org.apache.commons.collections4.Closure-boolean-) - Static method in class org.apache.commons.collections4.functors.[WhileClosure](http://docs.google.com/org/apache/commons/collections4/functors/WhileClosure.html)

Factory method that performs validation.

[writableMap(Put<K, V>)](http://docs.google.com/org/apache/commons/collections4/SplitMapUtils.html#writableMap-org.apache.commons.collections4.Put-) - Static method in class org.apache.commons.collections4.[SplitMapUtils](http://docs.google.com/org/apache/commons/collections4/SplitMapUtils.html)

Get the specified [Put](http://docs.google.com/org/apache/commons/collections4/Put.html) as an instanceof [Map](https://docs.oracle.com/javase/7/docs/api/java/util/Map.html?is-external=true).

## Z

[zip(Iterable<? extends E>)](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html#zip-java.lang.Iterable-) - Method in class org.apache.commons.collections4.[FluentIterable](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html)

Returns a new FluentIterable whose iterator will traverse the elements of this iterable and the other iterable in alternating order.

[zip(Iterable<? extends E>...)](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html#zip-java.lang.Iterable...-) - Method in class org.apache.commons.collections4.[FluentIterable](http://docs.google.com/org/apache/commons/collections4/FluentIterable.html)

Returns a new FluentIterable whose iterator will traverse the elements of this iterable and the other iterables in alternating order.

[zippingIterable(Iterable<? extends E>, Iterable<? extends E>)](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#zippingIterable-java.lang.Iterable-java.lang.Iterable-) - Static method in class org.apache.commons.collections4.[IterableUtils](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html)

Interleaves two iterables into a single iterable.

[zippingIterable(Iterable<? extends E>, Iterable<? extends E>...)](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html#zippingIterable-java.lang.Iterable-java.lang.Iterable...-) - Static method in class org.apache.commons.collections4.[IterableUtils](http://docs.google.com/org/apache/commons/collections4/IterableUtils.html)

Interleaves two iterables into a single iterable.

[ZippingIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ZippingIterator.html)<[E](http://docs.google.com/org/apache/commons/collections4/iterators/ZippingIterator.html)> - Class in [org.apache.commons.collections4.iterators](http://docs.google.com/org/apache/commons/collections4/iterators/package-summary.html)

Provides an interleaved iteration over the elements contained in a collection of Iterators.

[ZippingIterator(Iterator<? extends E>, Iterator<? extends E>)](http://docs.google.com/org/apache/commons/collections4/iterators/ZippingIterator.html#ZippingIterator-java.util.Iterator-java.util.Iterator-) - Constructor for class org.apache.commons.collections4.iterators.[ZippingIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ZippingIterator.html)

Constructs a new ZippingIterator that will provide interleaved iteration over the two given iterators.

[ZippingIterator(Iterator<? extends E>, Iterator<? extends E>, Iterator<? extends E>)](http://docs.google.com/org/apache/commons/collections4/iterators/ZippingIterator.html#ZippingIterator-java.util.Iterator-java.util.Iterator-java.util.Iterator-) - Constructor for class org.apache.commons.collections4.iterators.[ZippingIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ZippingIterator.html)

Constructs a new ZippingIterator that will provide interleaved iteration over the three given iterators.

[ZippingIterator(Iterator<? extends E>...)](http://docs.google.com/org/apache/commons/collections4/iterators/ZippingIterator.html#ZippingIterator-java.util.Iterator...-) - Constructor for class org.apache.commons.collections4.iterators.[ZippingIterator](http://docs.google.com/org/apache/commons/collections4/iterators/ZippingIterator.html)

Constructs a new ZippingIterator that will provide interleaved iteration of the specified iterators.

[zippingIterator(Iterator<? extends E>, Iterator<? extends E>)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#zippingIterator-java.util.Iterator-java.util.Iterator-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Returns an iterator that interleaves elements from the decorated iterators.

[zippingIterator(Iterator<? extends E>, Iterator<? extends E>, Iterator<? extends E>)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#zippingIterator-java.util.Iterator-java.util.Iterator-java.util.Iterator-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Returns an iterator that interleaves elements from the decorated iterators.

[zippingIterator(Iterator<? extends E>...)](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html#zippingIterator-java.util.Iterator...-) - Static method in class org.apache.commons.collections4.[IteratorUtils](http://docs.google.com/org/apache/commons/collections4/IteratorUtils.html)

Returns an iterator that interleaves elements from the decorated iterators.

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