

Idea

Trollies need some upgrade concerning sorting things.

Hints

- Arrays.sort(...)-method can sort an array of objects and needs a “compare()” – method to decide the sorting-order. The comparing has to be done by a separate class, which has to guarantee the existence of the “compare()” – method with the interface “Comparator”.

static void `sort(int[] a, int fromIndex, int toIndex)`
Sorts the specified range of the array into ascending order.

static void `sort(long[] a)`
Sorts the specified array into ascending numerical order.

static void `sort(long[] a, int fromIndex, int toIndex)`
Sorts the specified range of the array into ascending order.

static void `sort(Object[] a)`
Sorts the specified array of objects into ascending order, according to the **natural ordering** of its elements.

static void `sort(Object[] a, int fromIndex, int toIndex)`
Sorts the specified range of the specified array of objects into ascending order, according to the **natural ordering** of its elements.

static void `sort(short[] a)`
Sorts the specified array into ascending numerical order.

static void `sort(short[] a, int fromIndex, int toIndex)`
Sorts the specified range of the array into ascending order.

static <T> void `sort(T[] a, Comparator<? super T> c)`
Sorts the specified array of objects according to the order induced by the specified comparator.

static <T> void `sort(T[] a, int fromIndex, int toIndex, Comparator<? super T> c)`
Sorts the specified range of the specified array of objects according to the order induced by the specified comparator.

static `Splitter.OfDouble` `splitter(double[] array)`
Returns a `Splitter.OfDouble` covering all of the specified array.

static `Splitter.OfDouble` `splitter(double[] array, int startInclusive, int endExclusive)`
Returns a `Splitter.OfDouble` covering the specified range of the specified array.

static `Splitter.OfInt` `splitter(int[] array)`
Returns a `Splitter.OfInt` covering all of the specified array.

static `Splitter.OfInt` `splitter(int[] array, int startInclusive, int endExclusive)`
Returns a `Splitter.OfInt` covering the specified range of the specified array.

- Compare...interface

Since: 1.2

See Also: Comparable, Serializable

Method Summary

Modifier and Type	Method and Description
int	<code>compare(T o1, T o2)</code> Compares its two arguments for order.
static <T,U extends Comparable<? super U>> Comparator<T>	<code>comparing(Function<? super T,? extends U> keyExtractor)</code> Accepts a function that extracts a <code>Comparable</code> sort key from a type T, and returns a <code>Comparator<T></code> that compares by that sort key.
static <T,U> Comparator<T>	<code>comparing(Function<? super T,? extends U> keyExtractor, Comparator<? super U> keyComparator)</code> Accepts a function that extracts a sort key from a type T, and returns a <code>Comparator<T></code> that compares by that sort key using the specified <code>Comparator</code> .
static <T> Comparator<T>	<code>comparingDouble(ToDoubleFunction<? super T> keyExtractor)</code> Accepts a function that extracts a double sort key from a type T, and returns a <code>Comparator<T></code> that compares by that sort key.
static <T> Comparator<T>	<code>comparingInt(ToIntFunction<? super T> keyExtractor)</code> Accepts a function that extracts an int sort key from a type T, and returns a <code>Comparator<T></code> that compares by that sort key.
static <T> Comparator<T>	<code>comparingLong(ToLongFunction<? super T> keyExtractor)</code> Accepts a function that extracts a long sort key from a type T, and returns a <code>Comparator<T></code> that compares by that sort key.
boolean	<code>equals(Object obj)</code> Indicates whether some other object is "equal to" this comparator.
static <T extends Comparable<? super T>>	<code>naturalOrder()</code>

- Implementation of that interface

```
class ThingComparator implements Comparator<Thing>{

    @Override
    public int compare(Thing o1, Thing o2) {
        int retValue = 0;
    }
}
```

test-protocol:

```
***** by name *****
class supermarket.Trolley is SMALL with 4 different light things 0 different heavy things
- supermarket.LightThing: Kaeswurst, 5, 12 EUR/unit, Dienstag, 25 Okt 2016
- supermarket.LightThing: Leberwurst, 3, 10 EUR/unit, Samstag, 01 Dez 2012
- supermarket.LightThing: Metwurst, 4, 11 EUR/unit, Sonntag, 02 Dez 2012
- supermarket.LightThing: Salamiwurst, 2, 13 EUR/unit, Donnerstag, 06 Dez 2012
class supermarket.Trolley is MEDIUM with 2 different light things 1 different heavy things
- supermarket.HeavyThing: Bierkiste, 2, 20 EUR/unit, 12
- supermarket.LightThing: Leberwurst, 13, 10 EUR/unit, Samstag, 01 Dez 2012
- supermarket.LightThing: Semmel, 13, 10 EUR/unit, Freitag, 30 Nov 2012
class supermarket.Trolley is BIG with 2 different light things 2 different heavy things
- supermarket.HeavyThing: Bierkiste, 2, 20 EUR/unit, 12
- supermarket.HeavyThing: Erdaepfelkiste, 2, 20 EUR/unit, 12
- supermarket.LightThing: Leberwurst, 13, 10 EUR/unit, Dienstag, 25 Okt 2016
- supermarket.LightThing: Semmel, 13, 10 EUR/unit, Donnerstag, 27 Okt 2016
***** by name reverse *****
class supermarket.Trolley is SMALL with 4 different light things 0 different heavy things
- supermarket.LightThing: Salamiwurst, 2, 13 EUR/unit, Donnerstag, 06 Dez 2012
- supermarket.LightThing: Metwurst, 4, 11 EUR/unit, Sonntag, 02 Dez 2012
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- supermarket.HeavyThing: Erdaepfelkiste, 2, 20 EUR/unit, 12
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***** by price, name *****
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- supermarket.LightThing: Leberwurst, 13, 10 EUR/unit, Dienstag, 25 Okt 2016
```