## Interface Stream<T>

Modifier and Type	Method and Description
boolean	<pre>allMatch(Predicate<? super T> predicate) Returns whether all elements of this stream match the provided predicate.</pre>
boolean	<pre>anyMatch(Predicate<? super T> predicate) Returns whether any elements of this stream match the provided predicate.</pre>
OptionalDouble	average() Returns an OptionalDouble describing the arithmetic mean of elements of this stream, or an empty optional if this stream is empty.
<r,a> R</r,a>	<pre>collect(Collector<? super T,A,R> collector) Performs a mutable reduction operation on the elements of this stream using a Collector.</pre>
<r> R</r>	<pre>collect(Supplier<r> supplier, BiConsumer<r,? super="" t=""> accumulator, BiConsumer<r,r> combiner )    Performs a mutable reduction operation on the elements of this stream.</r,r></r,?></r></pre>
long	count() Returns the count of elements in this stream.
Stream <t></t>	distinct() Returns a stream consisting of the distinct elements (according to Object.equals(Object)) of this stream.
Stream <t></t>	filter(Predicate super T predicate) Returns a stream consisting of the elements of this stream that match the given predicate.
void	<pre>forEach(Consumer<? super T> action) Performs an action for each element of this stream.</pre>
<r> Stream<r></r></r>	<pre>map(Function<? super T,? extends R> mapper) Returns a stream consisting of the results of applying the given function to the elements of this stream.</pre>
DoubleStream	<pre>mapToDouble(ToDoubleFunction<? super T> mapper) Returns a DoubleStream consisting of the results of applying the given function to the elements of this stream.</pre>
IntStream	<pre>mapToInt(ToIntFunction<? super T> mapper) Returns an IntStream consisting of the results of applying the given function to the elements of this stream.</pre>
LongStream	<pre>mapToLong(ToLongFunction<? super T> mapper) Returns a LongStream consisting of the results of applying the given function to the elements of this stream.</pre>
Stream <t></t>	<pre>sorted(Comparator<? super T> comparator) Returns a stream consisting of the elements of this stream, sorted according to the provided Comparator.</pre>
int	sum() Returns the sum of elements in this stream.
IntSummaryStatistics	<pre>summaryStatistics() Returns an IntSummaryStatistics describing various summary data about the elements of this stream.</pre>

## **Class Collectors**

Modifier and Type	Method and Description
<pre>static <t,a,r,rr> Collector<t,a,rr></t,a,rr></t,a,r,rr></pre>	<pre>collectingAndThen(Collector<t,a,r> downstream, Function<r,rr> finisher )</r,rr></t,a,r></pre>
<pre>static <t,k> Collector<t,?,map<k,list<t>&gt;&gt;</t,?,map<k,list<t></t,k></pre>	Adapts a Collector to perform an additional finishing transformation.  groupingBy(Function super T,? extends K classifier)  Returns a Collector implementing a "group by" operation on input elements of type T, grouping elements according to a classification function, and returning the results in a Map.
<pre>static <t,k,a,d> Collector<t,?,map<k,d>&gt;</t,?,map<k,d></t,k,a,d></pre>	<pre>groupingBy(Function<? super T,? extends K> classifier, Collector<? super T,A,D> downstream) Returns a Collector implementing a cascaded "group by" operation on input elements of type T, grouping elements according to a classification function, and then performing a reduction operation on the values associated with a given key using the specified downstream Collector.</pre>
<pre>static <t> Collector<t,?,optional<t>&gt;</t,?,optional<t></t></pre>	<pre>maxBy(Comparator<? super T> comparator) Returns a Collector that produces the maximal element according to a given Comparator, described as an Optional<t>.</t></pre>
<pre>static <t> Collector<t,?,optional<t>&gt;</t,?,optional<t></t></pre>	minBy(Comparator super T comparator)  Returns a Collector that produces the minimal element according to a given Comparator, described as an Optional <t>.</t>
<pre>static<t> Collector<t,?,map<boolean,list<t>&gt;&gt;</t,?,map<boolean,list<t></t></pre>	<pre>partitioningBy(Predicate<? super T> predicate) Returns a Collector which partitions the input elements according to a Predicate, and organizes them into a Map<boolean, list<t="">&gt;.</boolean,></pre>
<pre>static <t,d,a> Collector<t,?,map<boolean,d>&gt;</t,?,map<boolean,d></t,d,a></pre>	<pre>partitioningBy(Predicate<? super T> predicate, Collector<? super T,A,D> downstream) Returns a Collector which partitions the input elements according to a Predicate, reduces the values in each partition according to another Collector, and organizes them into a Map<boolean, d=""> whose values are the result of the downstream reduction.</boolean,></pre>
<pre>static <t> Collector<t,?,list<t>&gt;</t,?,list<t></t></pre>	toList() Returns a Collector that accumulates the input elements into a new List.

## Interface Comparator<T>

Modifier and Type	Method and Description
int	<pre>compare(T o1, T o2) Compares its two arguments for order.</pre>
<pre>static <t,u comparable<?="" extends="" super="" u="">&gt; Comparator<t></t></t,u></pre>	<pre>comparing(Function<? super T,? extends U> keyExtractor)   Accepts a function that extracts a Comparable sort key from a type T, and returns a Comparator<t> that compares by that sort key.</t></pre>
static <t,u> Comparator<t></t></t,u>	<pre>comparing(Function<? super T,? extends U> keyExtractor, Comparator<? super U> keyComparator)   Accepts a function that extracts a sort key from a type T, and returns a Comparator<t> that compares by that sort key using the specified Comparator.</t></pre>
default Comparator <t></t>	<pre>thenComparing(Comparator<? super T> other) Returns a lexicographic-order comparator with another comparator.</pre>