***Iterable***

|  |  |
| --- | --- |
| ***Return Type*** | ***Methods*** |
| default void | [*forEachRemaining*](https://docs.oracle.com/javase/8/docs/api/java/util/Iterator.html#forEachRemaining-java.util.function.Consumer-)*(*[*Consumer*](https://docs.oracle.com/javase/8/docs/api/java/util/function/Consumer.html)*<? super*[*E*](https://docs.oracle.com/javase/8/docs/api/java/util/Iterator.html)*> action)* |
| [Iterator](https://docs.oracle.com/javase/8/docs/api/java/util/Iterator.html)<[T](https://docs.oracle.com/javase/8/docs/api/java/lang/Iterable.html)> | [iterator](https://docs.oracle.com/javase/8/docs/api/java/lang/Iterable.html#iterator--)() |
| default [Spliterator](https://docs.oracle.com/javase/8/docs/api/java/util/Spliterator.html" \o "interface in java.util)<[T](https://docs.oracle.com/javase/8/docs/api/java/lang/Iterable.html)> | [spliterator](https://docs.oracle.com/javase/8/docs/api/java/lang/Iterable.html#spliterator--)() |

***Refer:<https://docs.oracle.com/javase/8/docs/api/java/lang/Iterable.html>***

***Iterator (Interface)***

* *It is an interface that is practiced in order to iterate over collection of java object component*
* *Single direction iteration used for almost all colletion classed*
* *It is majorly used when there is customized iteration required and to handle large file/data*

***Declaration: Iterator <Integer> iterator= list1.iterator()***

***Important Functions/Operations of Iterator class***

|  |  |
| --- | --- |
| ***Return Type*** | ***Methods*** |
| default void | [*forEachRemaining*](https://docs.oracle.com/javase/8/docs/api/java/util/Iterator.html#forEachRemaining-java.util.function.Consumer-)*(*[*Consumer*](https://docs.oracle.com/javase/8/docs/api/java/util/function/Consumer.html)*<? super*[*E*](https://docs.oracle.com/javase/8/docs/api/java/util/Iterator.html)*> action)* |
| boolean | [hasNext](https://docs.oracle.com/javase/8/docs/api/java/util/Iterator.html#hasNext--)() |
| E | [next](https://docs.oracle.com/javase/8/docs/api/java/util/Iterator.html#next--)() |
| void | [remove](https://docs.oracle.com/javase/8/docs/api/java/util/Iterator.html#remove--)() |

***Refer:*** [***https://docs.oracle.com/javase/8/docs/api/java/util/Iterator.html***](https://docs.oracle.com/javase/8/docs/api/java/util/Iterator.html)

***List Iterator (Interface)***

* *Interator used for bi-directional access*
* *Used only for List collection*

***Declaration: Iterator <Integer> iterator= list1.listIterator()***

***Important Functions/Operations of Iterator class***

|  |  |
| --- | --- |
| ***Return Type*** | ***Methods*** |
| default void | [*forEachRemaining*](https://docs.oracle.com/javase/8/docs/api/java/util/Iterator.html#forEachRemaining-java.util.function.Consumer-)*(*[*Consumer*](https://docs.oracle.com/javase/8/docs/api/java/util/function/Consumer.html)*<? super*[*E*](https://docs.oracle.com/javase/8/docs/api/java/util/Iterator.html)*> action)* |
| boolean | [hasNext](https://docs.oracle.com/javase/8/docs/api/java/util/Iterator.html#hasNext--)() |
| E | [next](https://docs.oracle.com/javase/8/docs/api/java/util/Iterator.html#next--)() |
| void | [remove](https://docs.oracle.com/javase/8/docs/api/java/util/Iterator.html#remove--)() |
| void | [add](https://docs.oracle.com/javase/8/docs/api/java/util/ListIterator.html#add-E-)([E](https://docs.oracle.com/javase/8/docs/api/java/util/ListIterator.html) e) |
| boolean | [hasPrevious](https://docs.oracle.com/javase/8/docs/api/java/util/ListIterator.html#hasPrevious--)() |
| E | [previous](https://docs.oracle.com/javase/8/docs/api/java/util/ListIterator.html#previous--)() |
| int | [previousIndex](https://docs.oracle.com/javase/8/docs/api/java/util/ListIterator.html#previousIndex--)() |
| int | [nextIndex](https://docs.oracle.com/javase/8/docs/api/java/util/ListIterator.html#nextIndex--)() |
| void | [set](https://docs.oracle.com/javase/8/docs/api/java/util/ListIterator.html#set-E-)([E](https://docs.oracle.com/javase/8/docs/api/java/util/ListIterator.html) e) |

***Refer:*** [***https://docs.oracle.com/javase/8/docs/api/java/util/ListIterator.html***](https://docs.oracle.com/javase/8/docs/api/java/util/ListIterator.html)