

# Scala Collection

Scala provides rich set of collection library. It contains classes and traits to collect data. These collections can be mutable or immutable. You can use them according to your requirement. `Scala.collection.mutable` package contains all the mutable collections. You can add, remove and update data while using this package.

`Scala.collection.immutable` contains all the immutable collections. It does not allow you to modify data. Scala imports this package by default. If you want mutable collection, you must import `scala.collection.mutable` package in your code.

## Scala Immutable Collections Hierarchy

The `scala.collection.immutable` package contains all the immutable abstract classes and traits for collections.

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### Scala Traversable

It is a trait and used to traverse collection elements. It is a base trait for all scala collections.

It implements the methods which are common to all collections.

## Some Significant Methods of Traversable Trait

Method	Description
<code>def head: A</code>	It returns the first element of collection.
<code>def init: Traversable[A]</code>	It returns all elements except last one.
<code>def isEmpty: Boolean</code>	It checks whether the collection is empty or not. It returns either true or false.
<code>def last: A</code>	It returns the last element of this collection.
<code>def max: A</code>	It returns the largest element of this collection.
<code>def min: A</code>	It returns smallest element of this collection
<code>def size: Int</code>	It is used to get size of this traversable and returns a number of elements

present in this traversable.

def sum: A      It returns sum of all elements of this collection.

def tail: Traversable[A] It returns all elements except first.

def toArray: Array[A]    It converts this collection to an array.

def toList: List[A]        It converts this collection to a list.

def toSeq: Seq[A]         It converts this collection to a sequence.

def toSet[B >: A]: immutable.Set[B]      It converts this collection to a set.

### Scala Iterable

It is a next trait from the top of the hierarchy and a base trait for iterable collections. It extends traversable trait and provides important methods to concrete classes.