

## Comparison of SET Interface Method

Hash Set [1]	Tree Set [2]
add(E e) clean() clone() contains(object o) isEmpty() iterator() remove() size()	add(E e) clean() clone() contains(object o) isEmpty() iterator() size() addAll(Collection c) descendingIterator() ceiling(E e) comparator() descendingSet() E floor() E first() E last() E lower() E pollFirst() E pollLast() headSet(E toElement) headSet( E toElement ,boolean inclusive) remove(Object subSet( E fromElement, boolean fromInclusive, E to Element , boolean toInclusive) subSet(E formElement, E toElement) tainSet( e formElement) tailSet( E formElement , boolean inclusive)

<b>Operation [3]</b>	<b>Hash Set</b>	<b>Tree Set</b>
Order	Random	Sorted
Null Value	Allow	Not Allow
Performance	$O(1)$ ,Faster	$\log(n)$ ,Slower
Synchronized	No	No
Thread Safe	No	No
Use	equals()	compareTo()
Backhand	Hash Map	Tree Map
Unique	Yes	Yes

**Reference:**

- [1] [https://www.tutorialspoint.com/java/util/java\\_util\\_hashset.htm](https://www.tutorialspoint.com/java/util/java_util_hashset.htm)
- [2] [https://www.tutorialspoint.com/java/util/java\\_util\\_treeset.htm](https://www.tutorialspoint.com/java/util/java_util_treeset.htm)
- [3] <http://javahungry.blogspot.com/2014/03/difference-between-hashset-and-treeset-similarities-and-example.html>