

**HashSet Assignments**

1. WAP to create a HashSet with Integer objects without using generics
2. WAP to create a HashSet with some colors (String) using generics
3. WAP to create a HashSet from an ArrayList
4. WAP to iterate through all elements in a HashSet and print the elements. Observe the order of elements.
5. WAP to get the number of elements in a HashSet.
6. WAP to empty a HashSet.
7. WAP to test if a HashSet is empty or not.
8. WAP to convert a HashSet to an array.
9. WAP to remove all of the elements from a HashSet.
10. WAP to add user defined objects of type Employee in a HashSet. Print the contents in the Set.
11. WAP to add user defined objects of type Employee in a HashSet using duplicate Employee object. Print the contents in the Set.
12. WAP to add user defined objects of type Employee which now implements Comparable interface in a HashSet. Print the contents in the Set. Add duplicate Employee object and print the contents in the Set. Observe the values.
13. WAP to convert a HashSet to a List/ArrayList.
14. WAP to compare the elements in two HashSets.
15. WAP to compare two sets and retain elements which are same on both sets.

**LinkedHashSet Assignment**

1. Do all above assignments but using LinkedHashSet

### **TreeSet Assignments**

1. WAP to create a TreeSet from a HashSet.
2. WAP to create a new TreeSet, add Strings and print the TreeSet .
3. WAP to iterate through all elements in a TreeSet.
4. WAP to get the first and last elements in a TreeSet.
5. WAP to get the number of elements in a TreeSet.
6. WAP to create a reverse order view of the elements contained in a given TreeSet.
7. WAP to remove a given element from a TreeSet.
8. WAP to retrieve and remove the lowest element of a TreeSet using a single method call. Repeat the same using 2 different method calls.
9. WAP to retrieve and remove the highest element of a TreeSet using a single method call. Repeat the same using 2 different method calls.
10. WAP to get the element in a TreeSet which is greater than or equal to the given element.
11. WAP to get the element in a TreeSet which is less than or equal to the given element.
12. WAP to get the element in a TreeSet which is strictly greater than or equal to the given element.
13. WAP to get an element in a TreeSet which is strictly less than the given element.
14. WAP to compare two TreeSets.
15. WAP to find the numbers less than 7 in a TreeSet which contains Integer objects.
16. WAP to find the numbers greater than 7 in a TreeSet which contains Integer objects.
17. WAP to add all the elements of a specified TreeSet to another TreeSet.
18. WAP to add user defined objects of type Employee in a TreeSet. Print the contents in the Set.
19. WAP to add user defined objects of type Employee in a TreeSet using duplicate Employee object. Print the contents in the Set.
20. WAP to add user defined objects of type Employee which now implements Comparable interface in a TreeSet. Print the contents in the Set. Add duplicate Employee object and print the contents in the Set. Observe the values.
21. WAP to create a TreeSet and add user defined objects of type Employee (Employee is implementing Comparable interface in natural order). But use a Comparator which sorts in reverse order. Print the contents and observe the order of elements.