**Set**

Java's Set interface (java.util.Set) can be generified. In other words, instances of Set can be given a type, so only instances of that type can be inserted and read from that Set. Here is an example:

Set<String> set = new HashSet<String>;

This set is now targeted at only String instances, meaning only String instances can be put into this set. If you try to put something else into this Set, the compiler will complain.

**Example-**

***import*** *java.util.ArrayList;*

***import*** *java.util.HashSet;*

***import*** *java.util.List;*

***import*** *java.util.Set;*

***public******class*** *SetDemo {*

***public******static******void*** *main(String args[]){*

*/\*Creating HashSet\*/*

*Set s =* ***new*** *HashSet();*

*/\*Adding Elements\*/*

*s.add("A");*

*s.add("B");*

*s.add("C");*

*s.add("D");*

*/\*Checking if HashSet contains this element\*/*

***if****(s.contains("C"))*

*System.****out****.println("HashSet contains C");*

***else***

*System.****out****.println("HashSet does NOT contains C");*

***if****(s.contains("E"))*

*System.****out****.println(" HashSet contains E");*

***else***

*System.****out****.println("HashSet does NOT contains E");*

*/\*Obtaining size of HashSet\*/*

***int*** *setSize= s.size();*

*System.****out****.println("Size of Set:"+setSize);*

*/\*Removing element from HashSet\*/*

***boolean*** *b = s.remove("A");*

*System.****out****.println("Removed A ?:"+b);*

*b = s.remove("F");*

*System.****out****.println("Removed F?:"+b+ " (Already F is Not in the set)");*

*/\*Checking size again after removing\*/*

*setSize= s.size();*

*System.****out****.println("Size After removing :"+setSize);*

*/\*Making HashSet Empty\*/*

*b= s.isEmpty();*

*System.****out****.println(" Set Empty? :"+b);*

*s.clear();*

*b= s.isEmpty();*

*System.****out****.println(" Set Empty? :"+b);*

*/\*Checking again the size\*/*

*setSize= s.size();*

*System.****out****.println(" Size After Clearing :"+setSize);*

*}*

*}*

**OutPut**

HashSet contains C

HashSet does NOT contains E

Size of Set:4

Removed A ?:true

Removed F?:false (Already F is Not in the set)

Size After removing :3

Set Empty? :false

Set Empty? :true

Size After Clearing :0