### **Java Collections Interview Questions**

### **Difference between HashSet and HashMap**

### **Difference between HashMap and TreeMap**

* **How HashSet is implemented in Java?**

HashSet is implemented in Java using HashMap. Key is the object itself we are checking if present in the set and corresponding value is Object ***PRESENT*** = **new** Object(). So value is just dummy object named “PRESENT”.

**Which 2 methods should be implemented for the Key class of HashMap ? And Why?**

To compare two objects of your class you will have to override equals()

To use it as a key in any Hash based Data structure you will have to override hashcode()

### difference between HashMap and Hashtable?

|  |  |  |
| --- | --- | --- |
| No. | HashMap | Hashtable |
| 1 | HashMap is not synchronized. | Hashtable is synchronized. |
| 2 | HashMap can contain one null key and multiple null values. | Hashtable cannot contain any null key or null value. |
| 3 | HashMap is not thread-safe, so it is useful for non-threaded applications. | Hashtable is thread-safe, and it can be shared between various threads. |

### **advantage of the generic collection?**

There are three main advantages of using the generic collection.

* If we use the generic class, we don't need typecasting.
* It is type-safe and checked at compile time.
* Because of Generics, bug detectable at compile time.

### **default size of load factor in hashing based collection?**

The load factor is the measure that decides when to increase the capacity of the Map The default size of load factor is **0.75**. The default capacity is computed as initial capacity \* load factor. For example, 16 \* 0.75 = 12. So, 12 is the default capacity of Map.

### **Write code** [**to remove duplicates from LinkedList?**](https://www.javatpoint.com/how-to-remove-duplicates-from-arraylist-in-java)

### [**How to reverse**](https://www.javatpoint.com/how-to-reverse-arraylist-in-java) [**Linked**](https://www.javatpoint.com/how-to-remove-duplicates-from-arraylist-in-java)**List**[**?**](https://www.javatpoint.com/how-to-reverse-arraylist-in-java) **Also implement the code without using reverse().**

Collections.reverse(list);

**How to sort list in Java?**

Collections.sort()

**Write code to iterate through a Map.**

**for** (Map.Entry<String,String> entry : map.entrySet())

    System.out.println("Key = " + entry.getKey() + ", Value = " + entry.getValue());