What is Hashtable

Hashtable class in Java is a concrete implementation of abstract Dictionary class.

It is a data structure similar to Java HashMap that can store a collection of elements (objects) in the form of key-value pairs (entries).

Key objects must implement hashCode() and equals() methods to store and retrieve values from the Hashtable.

In other words, Hashtable can only store key objects that override hashCode() and equals() methods defined by the Object class.

The main difference between Hashtable and HashMap is the way they work with thread access.

- Hashtable class is a synchronized class that means it is thread-safe. Multiple threads cannot access the same instance of the Hashtable class concurrently (at the same time).
- HashMap class is not synchronized which means it is not thread-safe. Multiple threads can access the same instance of HashMap class simultaneously. Therefore, it is safe to use only when one thread uses an object.

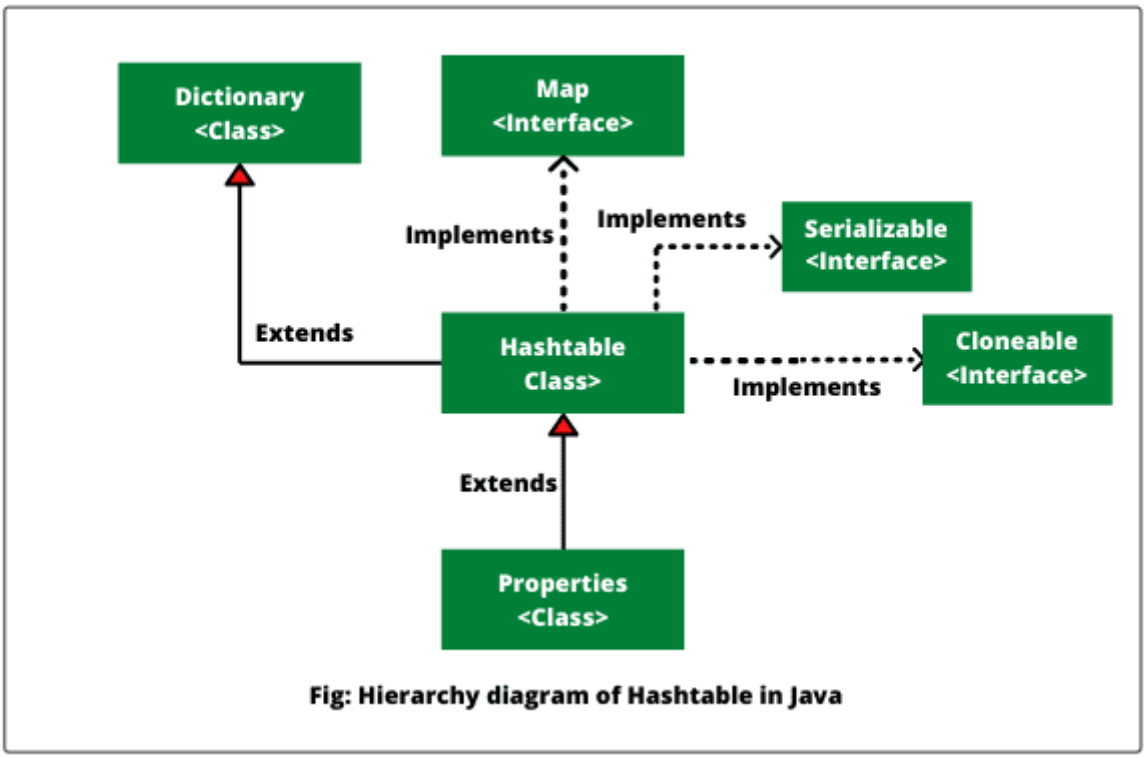

Fig: Hierarchy diagram of Hashtable in Java

Java Comparable interface