LinkedHashMap in Java

BY CHAITANYA SINGH | FILED UNDER: JAVA COLLECTIONS

LinkedHashMap is a Hash table and linked list implementation of the Map interface, with predictable iteration order. This implementation differs from HashMap in that it maintains a doubly-linked list running through all of its entries. This linked list defines the iteration ordering, which is normally the order in which keys were inserted into the map (insertion-order). In last few tutorials we have discussed about HashMap and TreeMap. This class is different from both of them:

- `HashMap` doesn't maintain any order.
- `TreeMap` sort the entries in ascending order of keys.
- `LinkedHashMap` maintains the insertion order.

Let's understand the `LinkedHashMap` with the help of an example:

```
import java.util.LinkedHashMap;
import java.util.Set;
import java.util.Iterator;
import java.util.Map;
public class LinkedHashMapDemo {
    public static void main(String args[]) {
         // HashMap Declaration
         LinkedHashMap<Integer, String> lhmap =
                 new LinkedHashMap<Integer, String>();

         //Adding elements to LinkedHashMap
         lhmap.put(22, "Abey");
         lhmap.put(33, "Dawn");
         lhmap.put(1, "Sherry");
         lhmap.put(2, "Karon");
         lhmap.put(100, "Jim");

         // Generating a Set of entries
         Set set = lhmap.entrySet();

         // Displaying elements of LinkedHashMap
         Iterator iterator = set.iterator();
         while(iterator.hasNext()) {
            Map.Entry me = (Map.Entry)iterator.next();
            System.out.print("Key is: "+ me.getKey() +
                    "& Value is: "+me.getValue()+"\n");
         }
    }
}
```

Output:

```
Key is: 22& Value is: Abey
Key is: 33& Value is: Dawn
Key is: 1& Value is: Sherry
```

```
Key is: 2& Value is: Karon
Key is: 100& Value is: Jim
```

As you can see the values are returned in the same order in which they got inserted.