

Phase-1 Practice Project: Assisted Practice

6. Writing a program in Java to verify implementations of maps

```
package Mydemo;

import java.util.HashMap;
import java.util.Hashtable;
import java.util.TreeMap;
import java.util.Map;

public class Maps
{
    public static void main(String[] args) {
        // TODO Auto-generated method stub
        System.out.println("HashMap");
        HashMap <Integer, String> hm = new HashMap<>();
        hm.put(1, "Kamal");
        hm.put(2, "Shashi");
        hm.put(3, "Harish");
        System.out.println("The Elements of HashMap are: ");
        for (Map.Entry <Integer, String> m : hm.entrySet())
        {
            System.out.println(m.getKey() + " " + m.getValue());
        }
        System.out.println("\n"); System.out.println("HashTable");
        Hashtable<Integer, String> ht = new Hashtable<>();
        ht.put(1, "Vineeth");
        ht.put(2, "Vamshi");
        ht.put(3, "Krishna");
        System.out.println("The Elements of HashTable are: ");
        for (Map.Entry <Integer, String> k : ht.entrySet())
        {
```

```

        System.out.println(k.getKey() + " " + k.getValue());
    }

    System.out.println("\n"); System.out.println("TreeMap");

    TreeMap<Integer, String> treemap = new TreeMap<>();

    treemap.put(4, "Sathwik");

    treemap.put(5, "Vijay");

    treemap.put(6, "Hruthik");

    System.out.println("The Elements of TreeMap are: ");

    for (Map.Entry<Integer, String> h : treemap.entrySet())
    {

        System.out.println(h.getKey() + " " + h.getValue());

    }

}

```

<terminated> Maps [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe

HashMap

The Elements of HashMap are:

```

1 Kamal
2 Shashi
3 Harish

```

HashTable

The Elements of HashTable are:

```

3 Krishna
2 Vamshi
1 Vineeth

```

TreeMap

The Elements of TreeMap are:

```

4 Sathwik
5 Vijay
6 Hruthik

```

} ◀