

Assignment – 16

1. Difference between hashmap and linkedhashmap?
2. Create a LinkedHashMap<int,String> where key is integers 1 to 10 and string is number in words. Remove entry for which number is divisible by 3.
3. Create a LinkedHashMap which contains Emp id as keys and Emp id as values. But Map does not contain Same id as key for Emp Object.
4. Create a Map which contains Integer as key and Another Map as Value. Another Map contains Emp as Key and Integer as value. Print the Map using Iterator.
5. Accept string from user. Create a map which has key as character in string and value as number of occurrences of that character in string. E.g. given string is "pizzapan" map will be <p,2>,<i, 1>,<z, 2>,<a,2>,<n,1>
6. An arraylist has strings "A+2" , "B+12" , "D+4" , "DD+5" and so on. Create a map which has alphabets as keys and integers as values. If alphabet is repeated add integer to old value.
7. Display LinkedHashMap created in Q3 in access order of entries.
8. Create LinkedHashMap which will have Student type key object and arraylist of course names for which Student admitted i.e., like LinkedHashMap<Student,ArrayList<Course>> . display list of courses for which student has enrolled.
9. What is difference between HashMap,Hashtable ?
10. What will be output of following.

```
public class MapDemo {  
  
    public static void main(String[] args) {  
  
        HashMap<Integer,String> map = new LinkedHashMap();  
  
        map.put(1 , "Jilebi");  
  
        map.put(2,"Modak");  
  
        map.put(3, "laddu");  
  
        if(map.put(2, "Barfi") == null )  
  
            System.out.println("yummy");  
  
        else
```

```
System.out.println("tasty");  
  
System.out.println(map.put(3, "Halwa"));  
  
System.out.println(map.size());  
  
}}
```

11. What is difference between HashMap and TreeMap?

12. Create Customer class with custid, custName, mobile fields. Create Order class with ordered, orderDetails fields.

Create TreeMap with customer as key and Order as value .it should be sorted according to custId in ascending order.

13. Add TreeMap created in Q12 in other TreeMap which should be sorted by custID in descending order.

14. Create TreeMap with month number as key and month name as value. Means it should contain entries like { 1=January, 2=February....}

From this treemap get portion of Map whose month numbers are between 3 to 7 including both 3 and 7.

15. Write a code to traverse a treemap created in Q12 using three different ways.

16. from treemap created in Q12 get order details of customer with custid 1101.

17. An arraylist has strings "A+2", "B+12", "D+4", "DD+5" and so on. Create a treemap which has alphabets as keys and integers as values. It should be sorted in descending order of keys.

18. Create three treemaps say m1, m2 and m3 . In each map rollno is key and studentName is values , it is sorted according to rollno as key.

Create another treemap where teacherid is key and map of respective student as value .

Display teacherid wise list of student names.

19. Display treemap created in q14 in reverse order.

20. What is difference between LinkedHashMap and TreeMap?