Assignment – 14

- 1. Explain the hierarchy of map?
- 2. WAP to add elements to a HashMap without using generics (i.e. do not use <>) and print content of it. Use Integer as Key and String as Value. In second HashMap add elements of String type as Key and Integer as Value.
- 3. WAP to add elements to a HashMap using generics with Integer as Key and String as value. And 4 key-value entries.
- 4. WAP to get all the entries from a HashMap. Iterate the entries and print the Key & Value.
- 5. Different ways to iterate over Map?
- 6. WAP to get only the Keys from a HashMap.
- 7. WAP to get only the Values from a HashMap.
- 8. WAP to copy all of the mappings from the specified HashMap to another map.
- 9. WAP to test if a HashMap contains a mapping for the specified key.
- 10. WAP to test if a HashMap contains a mapping for the specified value.
- 11. WAP to remove an element from HashMap using key.
- 12..Explain how put() method of HashMap works internally.

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13. ArrayList Contains
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al.add("pune");
al.add("Mumbai");
al.add("pune");
al.add("Mumbai");
al.add("Nasik");
al.add("pune");
create HashMap which contain String as key and Integer as value key is name of city and value is frequency of that city;
e.g m.put("pune",3);
m.put("Mumbai",2);
Print Map using For each loop.
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16. Write a program to create a hashmap as follows. A hashmap 'oldMap' has multiple duplicate values. Write a program to create new hashmap 'newMap' which contains keys as unique values of 'oldMap' and values as count of number of times value has appeared in 'map'.

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e.g. oldMap = (1, 'a'), (2, 'b'), (3, 'c'), (4, 'b'), (5, 'a'), (6, 'a')
newMap = \{'a', 3\}, ('b', 2), ('c', 1)
```

17. Create a hashmap which contains integer keys and String values. Take a string from user. Delete that entry in map if value matches with the input string.