## Hands-on Assignments for Map

## Complete the below hands-on assignments before proceeding with the next Topic

| No. | Hands-on Assignment   | Topics<br>Covered              | Status |
|-----|---|--------------------------------|--------|
| 1   | 1. Develop a java class with a instance variable M1 (HashMap) create a method saveCountryCapital(String CountryName, String capital), the method should add the passed country and capital as key/value in the map M1 and return the Map (M1).  Key- Country Value - Capital India Delhi Japan Tokyo  2. Develop a method getCapital(String CountryName) which returns the capital for the country passed, from the Map M1 created in step 1.  3. Develop a method getCountry(String capitalName) which returns the country for the capital name, passed from the Map M1 created in step 1.  4. Develop a method which iterates through the map M1 and creates another map M2 with Capital as the key and value as Country and returns the Map M2.  Key - Capital Value - Country Delhi India Tokyo Japan  5. Develop a method which iterates through the map M1 and creates an ArrayList with all the Country names stored as keys. This method should return the ArrayList. | Map<br>HashMap                 |        |
| 2   | NOTE: You can test the methods using a main method.  Create a Collection called HashMap which is capable of storing String objects. The program should have the following abilities  a) Check if a particular key exists or not. b) Check if a particular value exists or not. c) Use Iterator to loop through the map.   | Map<br>HashMap                 |        |
| 3   | Write a program that will have a Properties class object which is capable of storing some States of India and their Capital. Use an Iterator to list all the elements stored in the Properties.   | Map<br>HashTable<br>Properties |        |
| 4   | Create a Collection "ContactList" using HashMap to store name and phone number of contacts added. The program should use appropriate generics (String, Integer) and have the following abilities:  a) Check if a particular key exists or not. b) Check if a particular value exists or not. c) Use Iterator to loop through the map.   | Map<br>HashMap                 |        |
| 5   | Implement the assignment 1 using TreeMap  | Map<br>TreeMap                 |        |

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|   | Implement the assignment 1 using HashTable | HashTable |  |