

### Assignment 1:

1. Develop a java class with a instance variable CountryMap HashMap (m1) add a method saveCountryCapital(String country, 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 country) which returns the capital for the country passed from the Map m1 created in step 1.

3. Develop a method getCountry(String capital) 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.

NOTE: You can test the methods using a main method.

### Assignment 2:

Create a Collection called HashMap which is capable of string 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 key set

### Assignment 3:

Write a program that will have a Properties class which is capable of storing some States of India and their Capital.

Use an Iterator to list all the elements of the Properties.

#### Assignment 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

#### Assignment 5:

Implement the assignment 1 using TreeMap

#### Assignment 6:

Implement the assignment 1 using HashTable