**Maps – HashMap:**

HashMap stores the data in Key Value pairs. It implements the Map Interface. To know a value of HashMap, one must know the key for it. It uses a technique called Hashing internally.

The following example shows:

1. How to declare a HashMap
2. Check if the HashMap is empty
3. Adding key value pairs to the map
4. Printing the map
5. Check if the map contains a key
6. Get a value using a key
7. Check to see if the map accepts duplicate key value pairs
8. Remove a key value pair using a key
9. Check if the map contains a value
10. Removing all key value pairs using clear()

**package** package1;

**import** java.util.HashMap;

**public** **class** HashMapExample {

**public** **static** **void** main(String[] args) {

// **TODO** Auto-generated method stub

HashMap<String, String> hm = **new** HashMap<String, String>();

//Check if the map is empty

**if**(hm.isEmpty()) {

System.***out***.println("Map is empty");

}

//Add key value pairs to map

hm.put("name", "Subbu");

hm.put("role","Test Manager");

hm.put("company", "IBM");

//Printing map

System.***out***.println(hm);

//check if the map contains a key

**if**(hm.containsKey("name")) {

System.***out***.println("Map contains key name");

}

//Getting a value using key

System.***out***.println(hm.get("name"));

//Checking to see if map accepts duplicate key value pairs

hm.put("name", "Subbu");

System.***out***.println(hm);

//Removing a key value pair (Company:IBM)

hm.remove("company");

System.***out***.println("Removed company IBM");

System.***out***.println(hm);

//Check to see if map contains a particular value

**if**(hm.containsValue("Subbu")) {

System.***out***.println("Map contains value Subbu");

}

//Removing all the key value pairs from a map

hm.clear();

System.***out***.println("Removed all key value pairs");

System.***out***.println("Size of map is "+hm.size());

}

}