

Program -1 – How to return map to method

```
package com.hashmap;
```

```
import java.util.HashMap;
```

```
import java.util.Map;
```

```
public class HashMapDemo5 {
```

```
    public HashMap<Integer,String> addEmployee(){
```

```
        HashMap<Integer, String> hashMap= new  
HashMap<Integer,String>();
```

```
        hashMap.put(10, "rohan");
```

```
        hashMap.put(20, "sohan");
```

```
        hashMap.put(30, "velocity");
```

```
        return hashMap;
```

```
    }
```

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

```
        HashMapDemo5 hashMapDemo5= new HashMapDemo5();
```

```
        System.out.println("first way="+hashMapDemo5.addEmployee());
```

```
//1st way
```

```
        HashMap<Integer, String> hashMap=hashMapDemo5.addEmployee();
```

```
//2nd way
```

```
        System.out.println("second way="+hashMap);
```

```
        Map<Integer, String> map= hashMapDemo5.addEmployee(); //3rd
```

```
way
```

```
        System.out.println("third way="+map);
```

```
    }
```

```
}
```

Program-2 Can we take custom Employee class as key in hashmap

```
package com.hashmap;
```

```
public class Employee {
```

```
    int id = 10;
```

```
    String name = "ram";
```

```
    String salary = "5000";
```

```
    public int getId() {
```

```
        return id;
```

```
    }
```

```
    public void setId(int id) {
```

```
        this.id = id;
```

```
    }
```

```
    public String getName() {
```

```
        return name;
```

```
    }
```

```
    public void setName(String name) {
```

```
        this.name = name;
```

```
    }
```

```
    public String getSalary() {
```

```
        return salary;
```

```
    }
```

```
    public void setSalary(String salary) {
```

```
        this.salary = salary;
```

```
    }
```

```
}
```

```

package com.hashmap;

import java.util.HashMap;

public class HashMapDemo6 {

    public static void main(String[] args) {

        HashMap<Employee, String> hashMap= new
HashMap<Employee,String>();

        Employee employee= new Employee();

        //employee as object in map as key and name as
value

        hashMap.put(employee, employee.getSalary());

        System.out.println(hashMap.get(employee));

    }
}

```

Program- 3

//ArrayList with HashMap example

```

package com.test;

import java.util.ArrayList;
import java.util.HashMap;
import java.util.List;
import java.util.Set;

public class HashMapDemo2 {

    public static void main(String[] args) {

        List<String> computeraccessories = new ArrayList<String>();
        computeraccessories.add("watch");
        computeraccessories.add("speaker");
        computeraccessories.add("laptop");
    }
}

```

```

List<String> electronics = new ArrayList<String>();
electronics.add("printer");
electronics.add("keyboard");
electronics.add("mouse");

ArrayList<String> furniture = new ArrayList<String>();
furniture.add("bed");
furniture.add("chair");
furniture.add("sofa");

/*
 * HashMap hm=new HashMap();
 * hm.put("ajay",20);
 * hm.put("sachin",50);
 */
// categories as key and value as ArrayList
HashMap<String, List<String>> categories = new
HashMap<String, List<String>>();
categories.put("Computer", computeraccessories); //passing
arraylist as value
categories.put("Electronics", electronics);
categories.put("Furniture", furniture);

// eshop as key-string, value as HashMap
HashMap<String, HashMap<String, List<String>>> eshop =
new HashMap<String, HashMap<String, List<String>>>();
eshop.put("E Shop", categories);

// how to iterate
Set<String> s = eshop.keySet(); //only key s contain E shop
for(String str : s) {
    System.out.println(str); //key
    //System.out.println(eshop.get(str)); //value-eshop.get(E
shop)--print
}
}
}

```