

Q . Write a code to execute following operations

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2
3 import java.util.HashMap;
4 import java.util.List;
5 import java.util.Map;
6
7 public class MapDemo {
8     Map<String,Integer> map = new HashMap(); no usages
9
10    public static void main(String[] args) {    }
11
12    // below method is responsible to populate the map
13    public void insertValueIntoMap() no usages
14    {}
15
16    // return the key if filterX is available in map
17    public String getValue(Integer filterX){ no usages
18        return null;
19    }
20
21    // return the List<> contains integer value , which is greater than filterX
22    public List<Integer> getMultipleValues(Integer filterX){ no usages
23        return null;
24    }
25
26    // sort the original map and return ,
27    // HINT : Always sort the map based on the Key, In this case it is String which is already Sorted
28    public Map<String,Integer> getSortedMap(){ no usages
29        return null;
30    }
31
32 }
33
```

Q2 : Implement the following Operations

```
1 package com.edu.p3;
2
3 import java.util.HashMap;
4 import java.util.List;
5 import java.util.Map;
6
7 public class MapCustomObjectDemo {
8
9     Map<Route, List<Flight>> allFlightMap = new HashMap<>(); no usages
10    public static void main(String[] args) {
11        /*call all business operations*/
12    }
13    /*mehod responsible to populate allFlightMap */
14    public void insertFlights(){} no usages
15    /*implement all overloaded method to retrieve Flights based on route*/
16    public List<Flight> getAllFlights(Route route) {return null;} no usages
17    public List<Flight> getAllFlights(Route route,String carrierName) {return null;} no usages
18    public List<Flight> getAllFlights(Route route,int price) {return null;} no usages
19    public void display(List<Flight> flights) { } no usages
20 }
21
22 /*Note : In order to match two Objects , use equals methods*/
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```
1 package com.edu.p3;
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3 public class Flight { 1 usage
4     private int flightId; no usages
5     private Route route; no usages
6     private String carrierName;// i.e. AirIndia, Indigo, GulfAir etc no usages
7     private int seats; no usages
8     private int price; // per seat price; no usages
9
10 }
11
```