**Assignment no-6**

**1)**Design a treemap and follow the steps-

|  |
| --- |
| TreeMap<Long, String> map = new TreeMap<>(); |
|  | map.put(46953787L,"Harsh"); |
|  | map.put(47865440L, "Rohan"); |
|  | map.put(76543680L, "shreya"); |
|  |  |
|  | System.out.println(map.keySet()); |
|  | System.out.println(map.values()); |
|  | System.out.println(map); |

2)Write a application to store 10 unique product objects.

|  |
| --- |
| HashSet<Integer> o = new HashSet<>(); |
|  | o.add(0); |
|  | o.add(2); |
|  | o.add(6); |
|  | o.add(3); |
|  | o.add(6); |
|  | o.add(2); |
|  | o.add(5); |
|  | o.add(7); |
|  | o.add(9); |
|  | System.out.println(o); |

3)Store at 10 Employee objects in an TreeSet<employee>.

|  |
| --- |
| Scanner sc = new Scanner(System.in); |
|  | TreeSet<details> Employee = new TreeSet<>(); |
|  | details E1 = new details(01,"Rohan",300, "IT"); |
|  | details E2 = new details(02, "Harsh", 400, "IT"); |
|  | details E3 = new details(03, "Abhishek", 700, "IT"); |
|  | details E4 = new details(04, "Pranjal", 500, "IT"); |
|  | details E5 = new details(05, "Bhanu", 900, "IT"); |
|  | details E6 = new details(06, "Afzal", 500, "IT"); |
|  | details E7 = new details(07, "Jeetu", 200, "IT"); |
|  | Employee.add(E1); |
|  | Employee.add(E2); |
|  | Employee.add(E3); |
|  | Employee.add(E4); |
|  | Employee.add(E5); |
|  | Employee.add(E6); |
|  | Employee.add(E7); |
|  | System.out.println("Enter the information you want to see: \n1. id\n 2. name\n 3. salary\n 4. department"); |
|  | System.out.println("Enter the number: "); |
|  | int num = sc.nextInt(); |
|  |  |
|  | for(details d:Employee) { |
|  | if (num == 1){ |
|  | System.out.println(d.id); |
|  | } |
|  | else if (num == 2){ |
|  | System.out.println(d.name); |
|  | } |
|  | else if (num == 3){ |
|  | System.out.println(d.salary); |
|  | } |
|  | else if (num == 4){ |
|  | System.out.println(d.department); |
|  | } |
|  | else { |
|  | System.exit(0); |
|  | } |
|  | // System.out.println(d.id + " " + d.name + " " + d.salary + " " + d.department); |
|  | } |
|  | } |
|  | } |
|  |  |
|  | class details implements Comparable<details>{ |
|  | int id; |
|  | String name; |
|  | int salary; |
|  | String department; |
|  |  |
|  | public details(int id, String name, int salary, String department){ |
|  | this.id = id; |
|  | this.name = name; |
|  | this.salary = salary; |
|  | this.department = department; |
|  | } |
|  | @Override |
|  | public int compareTo(details b) { |
|  | if(id>b.id){ |
|  | return 1; |
|  | }else if(id<b.id){ |
|  | return -1; |
|  | }else{ |
|  | return 0; |
|  | } |
|  | } |
|  | } |

4)Given a linkedlist of objects representing D.O.B print the date’s along with the message.

|  |
| --- |
| import java.util.LinkedList; |
|  | import java.util.Scanner; |
|  |  |
|  | class leapyear{ |
|  | int date; |
|  | int month; |
|  | int year; |
|  | public leapyear(int date, int month, int year){ |
|  | this.date = date; |
|  | this.month = month; |
|  | this.year = year; |
|  | } |
|  | } |
|  | public class collection { |
|  | public static void main(String[] args) { |
|  | Scanner sc = new Scanner(System.in); |
|  | LinkedList<leapyear> lp = new LinkedList<>(); |
|  | System.out.println("Enter the Date of Birth in DD/MM/YYYY"); |
|  | int date = sc.nextInt(); |
|  | int month = sc.nextInt(); |
|  | int year = sc.nextInt(); |
|  | leapyear l1 = new leapyear(date, month, year); |
|  | lp.add(l1); |
|  | for (leapyear l: lp){ |
|  | if(year % 400 == 0){ |
|  | System.out.println("Your birth's Date is: " + l.date + " - " + l.month + " - " + l.year); |
|  | System.out.println("It was a leap year"); |
|  | } |
|  | else if (year % 100 == 0){ |
|  | System.out.println("Your birth's Date is: " + l.date + " - " + l.month + " - " + l.year); |
|  | System.out.println("It was not a leap year"); |
|  | } |
|  | else if (year % 4 == 0){ |
|  | System.out.println("Your birth's Date is: " + l.date + " - " + l.month + " - " + l.year); |
|  | System.out.println("It was a leap year"); |
|  | } |
|  | else { |
|  | System.out.println("Your birth's Date is: " + l.date + " - " + l.month + " - " + l.year); |
|  | System.out.println("It was a not leap year"); |
|  | } |
|  | // System.out.println("Your birth's Date is: " + l.date + " - " + l.month + " - " + l.year); |
|  | // System.out.println("It was a leap year"); |
|  |  |
|  | } |
|  | } |
|  | } |