LAB 7

[Main.java](https://github.com/k7996g/JEE/blob/master/lab7/src/com/cg/lab7/bean/Main.java)

|  |
| --- |
| package com.cg.lab7.bean; |
|  |

|  |
| --- |
| import java.util.Scanner; |
|  |

|  |
| --- |
| public class Main { |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
| public static void main(String[] args) { |
|  |

|  |
| --- |
| // TODO Auto-generated method stub |
|  |

|  |
| --- |
| Scanner sc=new Scanner(System.in); |
|  |

|  |
| --- |
| int a[]=new int[4]; |
|  |

|  |
| --- |
| int d[]=new int[4]; |
|  |

|  |
| --- |
| SortAndReverse s1=new SortAndReverse(); |
|  |

|  |
| --- |
| System.out.println("Enter the no of the elements of the array"); |
|  |

|  |
| --- |
| int n=sc.nextInt(); |
|  |

|  |
| --- |
| int i; |
|  |

|  |
| --- |
| System.out.println("Enter the elements of the array"); |
|  |

|  |
| --- |
| for(i=0;i<n;i++) |
|  |

|  |
| --- |
| {a[i]=sc.nextInt(); |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| d=(int[]) s1.getSorted(a); |
|  |

|  |
| --- |
| for(int j:d) |
|  |

|  |
| --- |
| System.out.println(j); |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
|  |
|  |

}

[SortAndReverse.java](https://github.com/k7996g/JEE/blob/master/lab7/src/com/cg/lab7/bean/SortAndReverse.java)

|  |
| --- |
| package com.cg.lab7.bean; |
|  |

|  |
| --- |
| import java.util.\*; |
|  |

|  |
| --- |
| public class SortAndReverse { |
|  |

|  |
| --- |
| public int[] getSorted(int a[]) |
|  |

|  |
| --- |
| {ArrayList<String> s=new ArrayList<String>(); |
|  |

|  |
| --- |
| int i; |
|  |

|  |
| --- |
| int b[]=new int[a.length]; |
|  |

|  |
| --- |
| for(i=0;i<a.length;i++) |
|  |

|  |
| --- |
| { String s1=Integer.toString(a[i]); |
|  |

|  |
| --- |
| StringBuilder s2=new StringBuilder(s1); |
|  |

|  |
| --- |
| s2.reverse(); |
|  |

|  |
| --- |
| String s3=new String(s2); |
|  |

|  |
| --- |
| s.add(s3); |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| Collections.sort(s); |
|  |

|  |
| --- |
| String c[]=s.toArray(new String[0]); |
|  |

|  |
| --- |
| for(i=0;i<c.length;i++) |
|  |

|  |
| --- |
| {b[i]=Integer.parseInt(c[i]);} |
|  |

|  |
| --- |
| return b; |
|  |

|  |
| --- |
| /\* Iterator j=s.iterator(); |
|  |

|  |
| --- |
| while(j.hasNext()) |
|  |

|  |
| --- |
| System.out.println(j.next());\*/ |
|  |

|  |
| --- |
| } |
|  |

}

Lab\_7.2

|  |
| --- |
| package com.cg.lab7.bean; |
|  |

|  |
| --- |
| import java.util.\*; |
|  |

|  |
| --- |
| import java.util.Scanner; |
|  |

|  |
| --- |
| public class StringOp { |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
| public static void main(String[] args) { |
|  |

|  |
| --- |
| // TODO Auto-generated method stub |
|  |

|  |
| --- |
| StringOp s=new StringOp(); |
|  |

|  |
| --- |
| Scanner sc=new Scanner(System.in); |
|  |

|  |
| --- |
| System.out.println("Enter first String"); |
|  |

|  |
| --- |
| String s1=sc.next(); |
|  |

|  |
| --- |
| System.out.println("Enter Second String"); |
|  |

|  |
| --- |
| String s2=sc.next(); |
|  |

|  |
| --- |
| s.operation(s1, s2); |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| public void operation(String s1,String s2) |
|  |

|  |
| --- |
| { ArrayList<String> a=new ArrayList<String>(); |
|  |

|  |
| --- |
| a.add(s1); |
|  |

|  |
| --- |
| a.add(s2); |
|  |

|  |
| --- |
| int i; |
|  |

|  |
| --- |
| int choice; |
|  |

|  |
| --- |
| Scanner sc=new Scanner(System.in); |
|  |

|  |
| --- |
| System.out.println("Enter the choice"); |
|  |

|  |
| --- |
| choice=sc.nextInt(); |
|  |

|  |
| --- |
| String s=""; |
|  |

|  |
| --- |
| if(choice==1) |
|  |

|  |
| --- |
| { |
|  |

|  |
| --- |
| for(i=0;i<s2.length();i++) |
|  |

|  |
| --- |
| { if(i%2==0) |
|  |

|  |
| --- |
| { s=s1.replace(s1.charAt(i),s2.charAt(i)); |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| a.add(s); |
|  |

|  |
| --- |
| if(choice==2) |
|  |

|  |
| --- |
| { int x=s1.indexOf(s2); |
|  |

|  |
| --- |
| int j=s1.lastIndexOf(s2); |
|  |

|  |
| --- |
| if(j!=x) |
|  |

|  |
| --- |
| { |
|  |

|  |
| --- |
| StringBuilder s3=new StringBuilder(s2); |
|  |

|  |
| --- |
| s3.reverse(); |
|  |

|  |
| --- |
| String s4=new String(s3); |
|  |

|  |
| --- |
| StringBuilder s5=new StringBuilder(s1); |
|  |

|  |
| --- |
| s5.replace(j, j+s2.length(), s4); |
|  |

|  |
| --- |
| s4=new String(s5);a.add(s4);} |
|  |

|  |
| --- |
| else |
|  |

|  |
| --- |
| {System.out.println(s1+s2); |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| if(choice==3) |
|  |

|  |
| --- |
| {int x=s1.lastIndexOf(s2); |
|  |

|  |
| --- |
| int j=s1.indexOf(s2); |
|  |

|  |
| --- |
| if(j!=x) |
|  |

|  |
| --- |
| {StringBuilder s3=new StringBuilder(s1); |
|  |

|  |
| --- |
| s3.replace(j, j+s2.length(),""); |
|  |

|  |
| --- |
| String s4=new String(s3); |
|  |

|  |
| --- |
| a.add(s4); |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| else |
|  |

|  |
| --- |
| System.out.println(s1); |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| if(choice==4) |
|  |

|  |
| --- |
| {int j=s2.length(); |
|  |

|  |
| --- |
| StringBuilder s3=new StringBuilder(s1); |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
| if(j%2==0) |
|  |

|  |
| --- |
| {for(int x=0;x<j/2;x++) |
|  |

|  |
| --- |
| s3.insert(x,s2.charAt(x)); |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
| for(int x=j/2;x<j;x++) |
|  |

|  |
| --- |
| s3.append(s2.charAt(x)); |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
| String s4=new String(s3);a.add(s4);} |
|  |

|  |
| --- |
| else |
|  |

|  |
| --- |
| {for(int x=0;x<j/2+1;x++) |
|  |

|  |
| --- |
| s3.insert(x,s2.charAt(x)); |
|  |

|  |
| --- |
| for(int x=j/2+1;x<j;x++) |
|  |

|  |
| --- |
| s3.append(s2.charAt(x)); |
|  |

|  |
| --- |
| String s4=new String(s3);a.add(s4); |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| System.out.println(a); |
|  |

|  |
| --- |
| } |
|  |

}

|  |  |  |
| --- | --- | --- |
|  | [RemoveList.java](https://github.com/k7996g/JEE/blob/master/lab7.3/src/com/cg/lab7/bean/RemoveList.java) LAB 7.3 | |
| package com.cg.lab7.bean; | |
|  | |

|  |
| --- |
| import java.util.\*; |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
| public class RemoveList { |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
| public static void main(String[] args) { |
|  |

|  |
| --- |
| // TODO Auto-generated method stub |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
| ArrayList<String> a=new ArrayList<String>(); |
|  |

|  |
| --- |
| a.add("Kaushal"); |
|  |

|  |
| --- |
| a.add("Garg"); |
|  |

|  |
| --- |
| a.add("keshav"); |
|  |

|  |
| --- |
| a.add("chaudhary"); |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
| ArrayList<String> b=new ArrayList<String>(); |
|  |

|  |
| --- |
| b.add("keshav"); |
|  |

|  |
| --- |
| b.add("chaudhary"); |
|  |

|  |
| --- |
| RemoveList r=new RemoveList(); |
|  |

|  |
| --- |
| r.removeElements(a,b); |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| public void removeElements(List a,List b) |
|  |

|  |
| --- |
| {ArrayList<String> a1=new ArrayList<String>(); |
|  |

|  |
| --- |
| ArrayList<String> a2=new ArrayList<String>(); |
|  |

|  |
| --- |
| a1.addAll(a); |
|  |

|  |
| --- |
| a2.addAll(b); |
|  |

|  |
| --- |
| a1.removeAll(a2); |
|  |

|  |
| --- |
| Iterator i=a1.iterator(); |
|  |

|  |
| --- |
| System.out.println("Remaining elements after removing elements of the second list"); |
|  |

|  |
| --- |
| while(i.hasNext()) |
|  |

|  |
| --- |
| {System.out.println(i.next()); |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| } |
|  |

}

Lab\_7.4

|  |
| --- |
| package com.cg.lab7.bean; |
|  |

|  |
| --- |
| import java.util.\*; |
|  |

|  |
| --- |
| import java.util.Scanner; |
|  |

|  |
| --- |
| import java.lang.Math; |
|  |

|  |
| --- |
| public class Squares { |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
| public static void main(String[] args) { |
|  |

|  |
| --- |
| // TODO Auto-generated method stub |
|  |

|  |
| --- |
| Scanner sc=new Scanner(System.in); |
|  |

|  |
| --- |
| int a[]=new int[5]; |
|  |

|  |
| --- |
| System.out.println("Enter the elements of the array"); |
|  |

|  |
| --- |
| int i; |
|  |

|  |
| --- |
| for(i=0;i<5;i++) |
|  |

|  |
| --- |
| {a[i]=sc.nextInt(); |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| Squares s=new Squares(); |
|  |

|  |
| --- |
| HashMap<Integer,Double> h=new HashMap<Integer,Double>(); |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
| h= s.getSquares(a); |
|  |

|  |
| --- |
| System.out.println(h); |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| public HashMap getSquares(int a[]) |
|  |

|  |
| --- |
| {HashMap<Integer,Double> hm=new HashMap<Integer,Double>(); |
|  |

|  |
| --- |
| int i; |
|  |

|  |
| --- |
| for(i=0;i<a.length;i++) |
|  |

|  |
| --- |
| hm.put(a[i], Math.pow(a[i],2)); |
|  |

|  |
| --- |
| return hm; |
|  |

|  |
| --- |
| } |
|  |

}

Lab\_7.5

|  |
| --- |
| package com.cg.lab7.bean; |
|  |

|  |
| --- |
| import java.util.\*; |
|  |

|  |
| --- |
| import java.util.Scanner; |
|  |

|  |
| --- |
| public class UsingForEach { |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
| public static void main(String[] args) { |
|  |

|  |
| --- |
| // TODO Auto-generated method stub |
|  |

|  |
| --- |
| Scanner sc=new Scanner(System.in); |
|  |

|  |
| --- |
| int i; |
|  |

|  |
| --- |
| String s; |
|  |

|  |
| --- |
| System.out.println("Enter the elements of the list"); |
|  |

|  |
| --- |
| ArrayList<String> a=new ArrayList<String>(); |
|  |

|  |
| --- |
| for(i=0;i<5;i++) |
|  |

|  |
| --- |
| {s=sc.nextLine(); |
|  |

|  |
| --- |
| a.add(s); |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| UsingForEach u=new UsingForEach(); |
|  |

|  |
| --- |
| u.sortNames(a); |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| public void sortNames(List a) |
|  |

|  |
| --- |
| {ArrayList<String> a1=new ArrayList<String>(); |
|  |

|  |
| --- |
| a1.addAll(a); |
|  |

|  |
| --- |
| Collections.sort(a1); |
|  |

|  |
| --- |
| for(String s:a1) |
|  |

|  |
| --- |
| {System.out.println(s); |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| } |
|  |

}