**Problem-1**

import java.io.\*;

import java.util.\*;

public class Solution {

public static void main(String[] args) {

Scanner s = new Scanner(System.in);

int n = s.nextInt();

int[] a = new int[n];

for(int i=0;i<n;i++){

a[i]= s.nextInt();

}

int young=a[0];

int old = a[0];

for(int i=1;i<n;i++){

if(a[i]<young){

young = a[i];

}

if(a[i]>old){

old = a[i];

}

}

System.out.println("Youngest="+young);

System.out.println("Oldest="+old);

}

}

**Problem-2**

import java.io.\*;

import java.util.\*;

public class Solution {

public static void main(String[] args) {

Scanner s = new Scanner(System.in);

int n = s.nextInt();

int[] a = new int[n];

int x=0;

for(int i=0;i<n;i++){

a[i]= s.nextInt();

}

int b = s.nextInt();

for(int i=0;i<n;i++){

if(b==a[i]){

x=i;

break;

}else{

x=-1;

}

}if(x==-1){

System.out.print(x);

}else{

System.out.println("Door Number is 00"+x+"-DN");

}

}

}

**Problem-3**

import java.io.\*;

import java.util.\*;

public class Solution {

public static void main(String[] args) {

Scanner s = new Scanner(System.in);

int n = s.nextInt();

int[] a = new int[n];

int pos = 0;

int neg = 0;

for(int i=0;i<n;i++){

a[i]=s.nextInt();

if(a[i]<0){

neg++;

}else{

pos++;

}

}

System.out.printf("Count of Positive Integer is %.2f%n",(double)pos);

System.out.printf("Count of Negative Integer is %.2f%n",(double)neg);

}

}

**Problem-4**

import java.io.\*;

import java.util.\*;

public class Solution {

public static void main(String[] args) {

Scanner s = new Scanner(System.in);

int n=s.nextInt();

int[] a = new int[n];

for(int i=0;i<n;i++){

a[i]=s.nextInt();

}

int sum = 0;

for(int i=0;i<n;i++){

sum+=a[i];

}

double avg = (double)sum/n;

System.out.printf("Array Mean Value is %.2f%n",avg );

}

}

**Problem-5**

import java.io.\*;

import java.util.\*;

public class Solution {

public static void main(String[] args) {

Scanner s = new Scanner(System.in);

int n=s.nextInt();

int[] a = new int[n];

for(int i=0;i<n;i++){

a[i]=s.nextInt();

}

int count = 1;

for(int i=1;i<n;i++){

boolean b = true;

for(int j=0;j<i;j++){

if(a[i]==a[j]){

b = false;

break;

}

}

if(b){

count++;

}

}

if(count>1){

System.out.printf("There are "+count+" distinct elements in the array." );

}else{

System.out.printf("There are "+count+" distinct element in the array." );

}

}

}

**Problem-6**