Binary Search :

import java.util.\*;

import java.lang.\*;

import java.io.\*;

/\* Name of the class has to be "Main" only if the class is public. \*/

class Ideone

{

public static void binary(int arr[],int l,int r,int x)

{

if(l<r){

int mid=(l+r)/2; // 0+5/2 i.e 2 mid=4

if(x==arr[mid])

System.out.println(mid);

else if(x>arr[mid]) // 8>4 the true

{

binary(arr,mid+1,r,x); //(arr, 3,5,8)

}

else if(x<arr[mid])

{

binary(arr,l,mid-1,x);

}

}

else

{

System.out.println("no Such element");

}

}

public static void main (String[] args) throws java.lang.Exception

{

Scanner sc=new Scanner(System.in);

int n=sc.nextInt();

int arr[]=new int[n];

int x=sc.nextInt();

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

{

arr[i]=sc.nextInt();

}

binary(arr,0,n,x);

}

}