For each index,

**Add 1** to the value stored at that index if the element at that index is **greater than zero.**

**Add 2** to the value at the index if the element at that **index is equal to zero**.

**Add 3** to the value at the index if the element at that **index is less than zero**.

In the end **print** all the elements of the array such that each element is printed in a separate line.

**Input Format**

First line contains an integer number **n** representing size of array.

Second line contains **n** numbers representing elements of the array.

**Constraints**

```
1 <= n <= 100000

0 <= array[index] <= 100000
```

**Output Format**

Print the **updated** the values of array in single line.

**Sample Input 0**

```
3
-3 0 3
```

**Sample Output 0**

```
0 2 4
```

**Explanation 0**

since at index 0 value is negative therfore numbers[0] changes as numbers[0]+3 i.e = -3+3 = 0.

Similarly, at index 1 value is 0. Therefore we have added 2 to the numbers[1].

And at index 2, value is positive. Therefore we have added 1 to the numbers[2].

## Submitted Code

Language: Java 15

```java
import java.io.*;
import java.util.*;

public class Solution {

    public static void main(String[] args) {
       Scanner sc = new Scanner(System.in);
        int n = sc.nextInt();
        int arr[] = new int[n];
        for(int i=0;i<n;i++)arr[i]=sc.nextInt();

        int res[] = performOperation(arr);
        for(int i=0;i<res.length;i++)System.out.print(res[i]+" ");
    }
    public static int [] performOperation(int arr[]){
        for(int i=0;i<arr.length;i++){
            if(arr[i]>0)arr[i]=arr[i]+1;
            else if(arr[i]==0)arr[i]=arr[i]+2;
            else if(arr[i]<0)arr[i]=arr[i]+3;
        }
        return arr;
    }
}
```

## Submitted Code

Language: Java 15

```java
import java.io.*;
import java.util.*;

public class Solution {

    public static void main(String[] args) {
       Scanner sc = new Scanner(System.in);
        int n = sc.nextInt();
        int arr[] = new int[n];
        for(int i=0;i<n;i++)arr[i]=sc.nextInt();

         arr = performOperation(arr);
        for(int i=0;i<arr.length;i++)System.out.print(arr[i]+" ");
    }
    public static int [] performOperation(int arr[]){
        for(int i=0;i<arr.length;i++){
            if(arr[i]>0)arr[i]=arr[i]+1;
            else if(arr[i]==0)arr[i]=arr[i]+2;
            else if(arr[i]<0)arr[i]=arr[i]+3;
        }
        return arr;
    }
}
```

Take an number n and n elemetns from the user. Also Take left, right as integer inputs such that **0<=left, right and also take x as an integer input.**

**Then update the given array from 0 to index-left and from index-right to arr.length (both left index and right index included) by adding x** to the value already present at that index. In the end print all the elements of the array such that each element is printed in a separate line

**Input Format**

First line contains an integer number **n** representing size of array

Second line contains **n** integer number representing elements of array

Third line contains integer inputs **left** ,**right** and **x**.

**Constraints**

```
1 <= n <= 100000
0 <= arr[index] <= 100000
0 <= left <= right <n
0 <= x <= 100000
```

**Output Format**

single line containing **updated** value of array.

**Sample Input 0**

```
6
1 2 3 4 5 6
2 4
10
```

**Sample Output 0**

```
11 12 13 4 15 16
```

**Explanation 0**

since we are given left as 2 and right as 4.

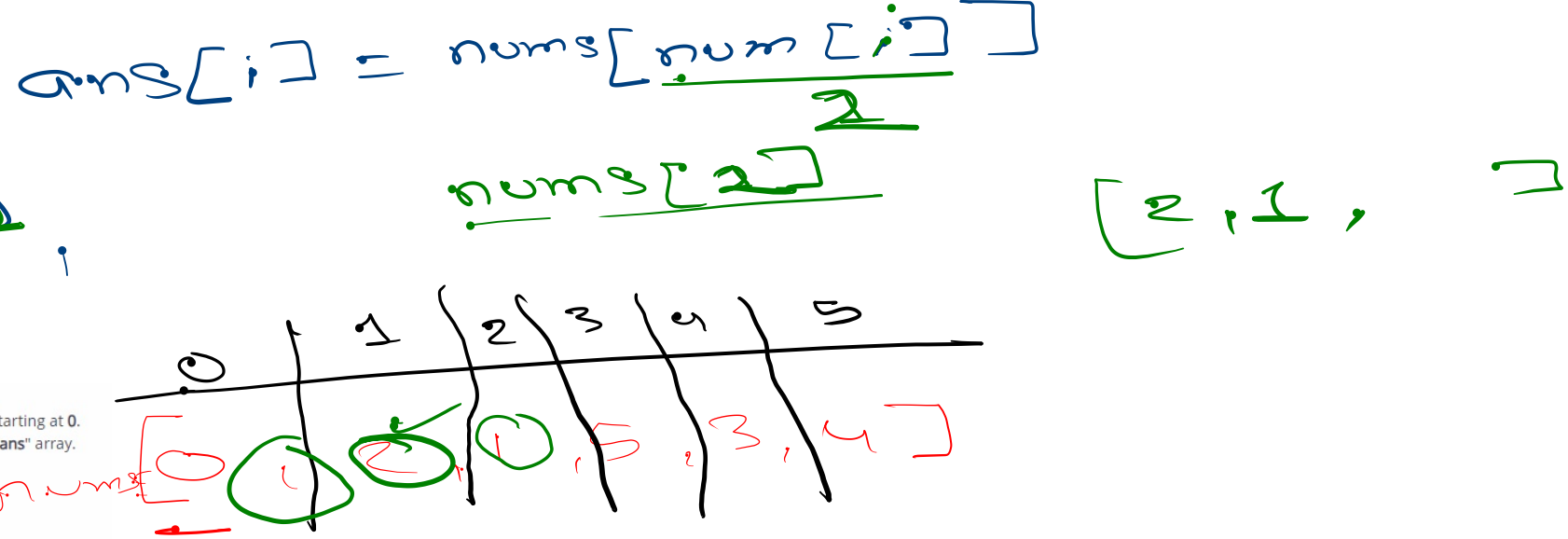
therefore for index 0 to 2 and 4 till length of array,we increase value at this indexes by given x i.e 10.

and print the resultant array in single line.

## Submitted Code

Language: Java 15

```
1  import java.io.*;
2  import java.util.*;
3
4  public class Solution {
5
6      public static void main(String[] args) {
7          Scanner sc = new Scanner(System.in);
8           int n = sc.nextInt();
9           int arr[] = new int[n];
10          for(int i=0;i<n;i++)arr[i]=sc.nextInt();
11          int left=sc.nextInt();
12          int right=sc.nextInt();
13         int x = sc.nextInt();
14           arr = updateQuery(arr,left,right,x);
15          for(int i=0;i<arr.length;i++)System.out.print(arr[i]+" ");
16      }
17
18      public static int [] updateQuery(int [] arr, int left , int right, int x){
19          for(int i=0;i<arr.length;i++){
20              if(i<=left || i>=right)arr[i]=arr[i]+x;
21          }
22          return arr;
23      }
24 }
```



Construct an array called "**ans**" that has the same length as the "**nums**" array, which is indexed starting at **0**. Each element in "**ans**" should be assigned with the value of "**nums[nums[i]]**". Finally, return the "**ans**" array.

Note: nums is an array of distinct integers from **0 to nums.length - 1**

**Input Format**

First line contains an integer number **n** representing size of array.

Second line contains **n** integer inputs representing elements of array.

**Constraints**

```
1 <= nums.length <= 1000

0 <= nums[i] < nums.length

The elements in nums are distinct
```

**Output Format**

Print **ans** array as an output.

**Sample Input 0**

```
6
0 2 1 5 3 4
```

**Sample Output 0**

```
0 1 2 4 5 3
```

**Explanation 0**

The array ans is built as follows: ans = [nums[nums[0]], nums[nums[1]], nums[nums[2]], nums[nums[3]], nums[nums[4]], nums[nums[5]]] = [nums[0], nums[2], nums[1], nums[5], nums[3], nums[4]] = [0,1,2,4,5,3]

## Submitted Code

Language: Java 15

```java
import java.io.*;
import java.util.*;

public class Solution {

    public static void main(String[] args) {
       Scanner sc = new Scanner(System.in);
        int n = sc.nextInt();
        int nums[] = new int[n];
        for(int i=0;i<n;i++)nums[i]=sc.nextInt();

        nums = elementIndex(nums);
        for(int i=0;i<nums.length;i++)System.out.print(nums[i]+" ");
    }
    public static int [] elementIndex(int nums[]){
        int ans [] = new int[nums.length];
        for(int i=0;i<nums.length;i++){
            ans[i]=nums[nums[i]];
        }
        return ans;
    }
}
```

Suppose you have an array of size **n** and a specific element **k**. Your task is to modify the array based on the following rules:

1. If the element is **even** and greater than **k**, divide it by **2**.
2. If the element is **odd** and greater than **k**, add **k** to it.

**Input Format**

First line contains integer number **n** representing size of array.

Second line contains **n** integer inputs representing elements of array.

Third line contains an integer **k**.

**Constraints**

```
1 <= n <= 10000

0 <= arr[i] < 10000

0 <= k <= 10000
```

**Output Format**

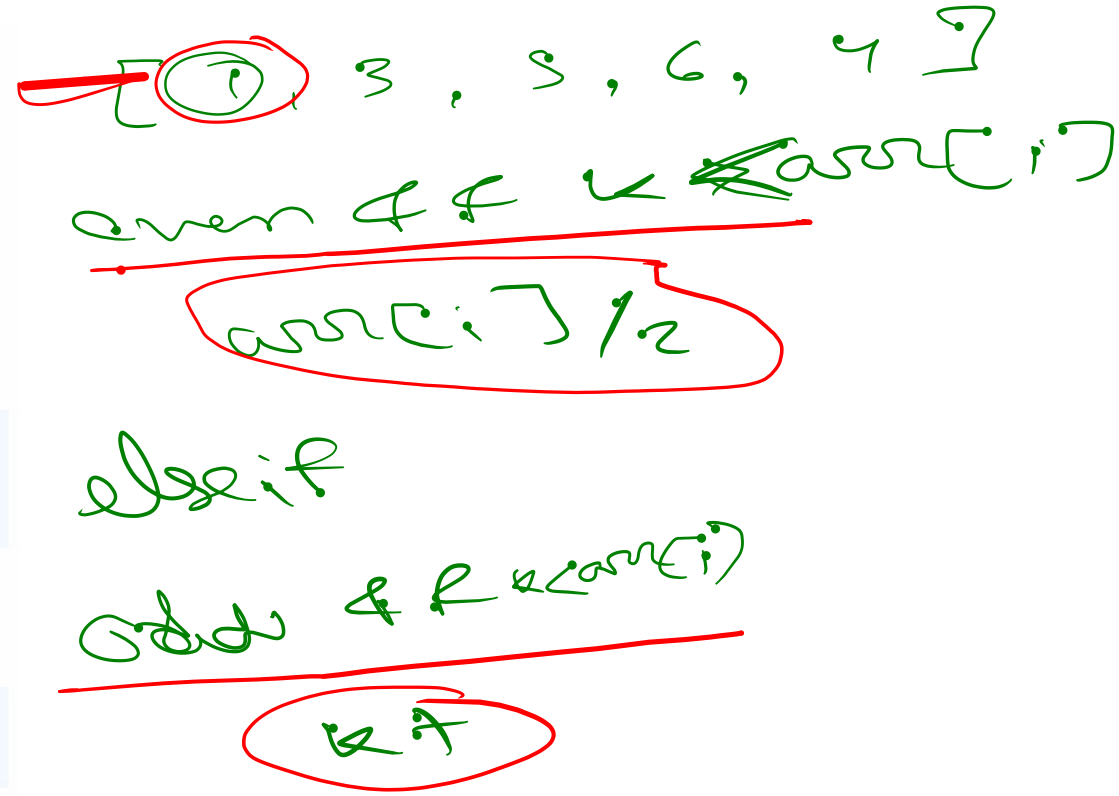
print the **updated** array.

**Sample Input 0**

```
5
1 3 5 6 4
2
```

**Sample Output 0**

```
1 5 7 3 2
```




## Submitted Code

Language: Java 15

```java
import java.io.*;
import java.util.*;

public class Solution {

    public static void main(String[] args) {
       Scanner sc = new Scanner(System.in);
        int n = sc.nextInt();
        int arr[]= new int[n];
        for(int i=0;i<n;i++)arr[i]=sc.nextInt();

        int k = sc.nextInt();
        arr= updateWithK(arr,k);

        for(int i=0;i<n;i++)System.out.print(arr[i]+" ");

    }
    public static int [] updateWithK(int [] arr , int k){
        for(int i=0;i<arr.length;i++){
            if(arr[i]>k){
                if(arr[i]%2==0)arr[i]=arr[i]/2;
                else arr[i]=arr[i]+k;
            }
        }
        return arr;
    }
}
```