

<https://course.acciojob.com/idle?question=f1e673c7-19e4-4d17-8fdc-6780dc6c1db5>

• EASY

• Max Score: 30 Points

AS Question 2

There are n kids with candies. You take input of an array (`candies[i]`) from the user where each `candies[i]` represents the number of candies the i th kid has (Each kid have atleast 1 candy).

Find out which kid has the maximum number of candies and using that information find out how many candies does the i th kid needs to have same number of candies as the kid with the maximum number of candies.

Print an array of all the deficits in the number of candies that each kid needs to have same number of candies.

Input Format

Line 1 contains an integer n denoting size of array.

Line 2 contains n single spaced integers denoting the array elements.

Output Format

Print the N array elements denoting the number of candies each kid needs so that all have same number of candies.

Example 1

Input

```
5
7 10 4 20 15
```

Output

13 10 16 0 5

Example 2

Input

3
1 2 3

Output

2 1 0

Constraints

$0 \leq n \leq 10^6$

$1 \leq \text{candies}[i] \leq 10^6$

Topic Tags

My code

```
// n java
import java.util.*;
import java.lang.*;
import java.io.*;
```

```
public class Main
{
```

```
public static void main (String[] args) throws
java.lang.Exception
{
    //your code here
    Scanner s=new Scanner(System.in);
    int n=s.nextInt();
    int arr[]=new int[n];

    for(int i=0;i<n;i++)
        arr[i]=s.nextInt();
    int max=arr[0];
    for(int i=0;i<n;i++)
        if(arr[i]>max)max=arr[i];
    for(int i=0;i<n;i++)
        arr[i]=max-arr[i];
    for(int i=0;i<n;i++)
        System.out.print(arr[i]+" ");
}
```

}