

<https://course.acciojob.com/idle?question=a55b9f82-c590-4967-97fd-3835d72e7b90>

● EASY

● Max Score: 30 Points

Get the desired array

Consider an array with N elements and value of all the elements is zero. We can perform following operations on the array.

Incremental operations: Choose 1 element from the array and increment its value by 1.

Doubling operation: Double the values of all the elements of array.

We are given desired array `target[]` containing N elements. Compute and return the smallest possible number of the operations needed to change the array from all zeros to desired array.

Input Format

First line contains integer N .

Second line contains n integers `target[i]`.

Output Format

Print the number of moves required.

Example 1

Input:

```
2
2 3
```

Output:

4

Explanation:

To get the target array from {0, 0}, we first increment both elements by 1 (2 operations), then double the array (1 operation). Finally increment second element (1 more operation)

Example 2

Input:

```
2
2 1
```

Output:

```
3
```

Explanation:

One of the optimal solution is to apply the incremental operation 2 times to first and once on second element.

Constraints

$0 \leq N \leq 10000$

$0 \leq \text{target}[i] \leq 100$

Topic Tags

- Arrays

My code

// in java

```

import java.util.*;

class Accio{
    static int Getthedesiredarray(int N,int[] arr){
        int ans =0;
        while(true)
        {
            for(int i=0;i<N;i++)
                if(arr[i]%2==1)
                {
                    arr[i]=arr[i]-1;
                    ans++;
                }
            int flag=0;
            for(int i=0;i<N;i++)
                if(arr[i]!=0)
                    flag=1;
            if(flag==0)
                break;
            for(int i=0;i<N;i++)
                arr[i]=arr[i]/2;
            ans++;
        }
        return ans;
    }
}

```

```

public class Main {
    public static void main(String[] args) throws Throwable {
        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();  
}  
Accio obj = new Accio();  
int ans=obj.Getthedesiredarray(n,nums);  
System.out.println(ans);  
}  
}
```