

<https://course.acciojob.com/idle?question=4aa157a3-b006-4855-985e-dd5da8b37a16>

● EASY

● Max Score: 30 Points

Maximum set bits

You are given an array `arr` of size `n`. Determine the element with the maximum number of set bits.

Input Format

First line of input contains a single number `n`.

Second line of input contains `n` space separated integers containing the element of array `arr`.

Output Format

Determine the element with maximum number of set bits.

Example 1

Input

```
4
1 2 3 4
```

Output:

```
3
```

Explanation:

1 has 1 set bit, 2 has 1 set bit, 3 has 2 set bit and 4 has 1 set bit.

Example 2

Input

```
3
2 4 8
```

Output:

```
2
```

Explanation:

Each element has only 1 set bit. So 2 is the desired output.

Constraints

```
1 <= n <= 10^5
```

```
1 <= arr[i] <= 10^7
```

Topic Tags

- Math
- Basics

My code

```
// in 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];
    int ans=0;
    int c=-1;
    for(int i=0;i<n;i++)
    {
        int count=0;

        int t=s.nextInt();
        int p=t;
        while(t>0)
        {
            if(t%2==1)
                count++;
            t=t/2;
        }
        if(count >c)
        {
            c=count;
            ans=p;
        }
    }
    System.out.print(ans);
}
}

```