



Dashboard > Algorithms > Bit Manipulation > Flipping bits

Badge Progress (Details)

Points: 2233.04 Rank: 4433

Flipping bits

by shaka_shadows

Problem

Submissions

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You will be given a list of 32 bits unsigned integers. You are required to output the list of the unsigned integers you get by flipping bits in its binary representation (i.e. unset bits must be set, and set bits must be unset).

Input Format

The first line of the input contains the list size T , which is followed by T lines, each line having an integer from the list.

Constraints

$$1 \leq T \leq 100$$

$$0 \leq \text{integer} < 2^{32}$$

Output Format

Output one line per element from the list with the requested result.

Sample Input

```
3
2147483647
1
0
```

Sample Output

```
2147483648
4294967294
4294967295
```

Explanation

Take 1 for example, as unsigned 32-bits is 00000000000000000000000000000001 and doing the flipping we get 11111111111111111111111111111110 which in turn is 4294967294.

[f](#) [t](#) [in](#)

Submissions: 35173

Max Score: 40

Difficulty: Easy

Rate This Challenge:

☆☆☆☆☆

Need Help?

[Binary](#)[More](#)

Current Buffer (saved locally, editable)

C#



```
1 using System;
2 using System.Collections.Generic;
3 using System.IO;
4 class Solution {
5     static void Main(String[] args) {
6         /* Enter your code here. Read input from STDIN. Print output to STDOUT. Your class should be
```

```
named solution */
7
8     int t = int.Parse(Console.ReadLine());
9
10    while (t-- > 0)
11    {
12        long n = long.Parse(Console.ReadLine());
13        //long n = 2147483648;
14        // long n = 1;
15
16        string sbin = Convert.ToString(n, 2);
17        sbin = new string('0', 32 - sbin.Length) + sbin;
18
19        char[] bin = sbin.ToCharArray();
20        // Console.WriteLine(bin);
21
22        char[] flip = new char[bin.Length];
23        for (int i = 0; i < flip.Length; i++)
24        {
25            flip[i] = (bin[i] == '1') ? '0' : '1';
26        }
27
28        //Console.WriteLine(new string(flip));
29
30        string sfflip = new string(flip);
31        int len = sfflip.Length;
32        long res = 0;
33        while (len > 0)
34        {
35            if (sfflip[sfflip.Length - len] == '1')
36            {
37                res += (long)Math.Pow(2, len - 1);
38            }
39            len--;
40        }
41
42        Console.WriteLine(res);
43    }
44 }
45
46
47 }
48 }
```

Line: 10 Col: 18

[Upload Code as File](#) ☐ Test against custom input

Run Code

Submit Code

Congrats, you solved this challenge!

✓ Test Case #0
✓ Test Case #3
✓ Test Case #6
✓ Test Case #9

✓ Test Case #1
✓ Test Case #4
✓ Test Case #7

✓ Test Case #2
✓ Test Case #5
✓ Test Case #8



Next Challenge

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