FTE Screening Test Batch of 2021 - Mock 1

Aug 02, 2020, 08:30 PM IST - Aug 02, 2020, 10:30 PM IST

11 LIVE EVENTS

INSTRUCTIONS PROBLEMS SUBMISSIONS LEADERBOARD ANALYTICS JUDGE

← Problems / Find Squirrel

Find Squirrel

Max. score: 100

This problem is no longer available for practice. Apology for any inconvenience!

Your friend, Squirrel has been kidnapped by an evil shape-shifting cult.
Together with your other friends, you have managed to locate their hideout.

Your goal now is to find Squirrel and escape.
But to foil your efforts, the cult has come up with an evil plan. Several cult members have shape-shifted to look just like Squirrel.

In fact, each cult member has created **three clones** of themselves after shapeshifting to Squirrel, and now all of them, including the real Squirrel stands before you in a straight line.
(If there were x cult members initially, now there are $3 * x + 1$ individuals, all of whom look like Squirrel)

Since Squirrel can not communicate with you, you are in a dilemma! Which one is the original Squirrel?!
Thankfully, each individual has a unique number associated with them, called their life-force.
This number does not change if you shapeshift or clone yourself, meaning, every clone of the cult members have the same value of life-force.

Time is running out!
Find the real Squirrel and escape with him as soon as possible.

P.S: Squirrel can neither shapeshift nor clone himself ;)

Input Format

Each test case consists of two lines, the first line contains a number N where $N <= 10^6$
The next line contains space-separated integers, $a_1, a_2, \ldots a_N$ denoting the life force of each individual before you.
$a_i <= 10^9$

Output Format
A single integer denoting the life force of Squirrel.

Note: Try to solve this question in linear time complexity and with constant additional space.

SAMPLE INPUT	SAMPLE OUTPUT
4 2 2 2 5	5

Explanation

The original Squirrel can not shapeshift or clone himself, hence his life force must be 5! The remaining numbers, 2,2and 2 must belong to the imposter, who has cloned themself thrice.
Remember, each imposter clones himself thrice, and each clone has the same value of life force.

Time Limit:	0.44 sec(s) for each input file.
Memory Limit:	10 MB
Source Limit:	1024 KB
Marking Scheme:	Score is assigned if any testcase passes.
Allowed Languages:	Bash, C, C++, C++14, C++17, Clojure, C#, D, Erlang, F#, Go, Groovy, Haskell, Java, Java 8, Java 14, JavaScript(Rhino), JavaScript(Node.js), Julia, Kotlin, Lisp, Lisp (SBCL), Lua, Objective-C, OCaml, Octave, Pascal, Perl, PHP, Python, Python 3, Python 3.8, R(RScript), Racket, Ruby, Rust, Scala, Swift-4.1, Swift, TypeScript, Visual Basic

Compilation Error

?

CODE EDITOR

11
LIVE EVENTS

Save C++17 (g++ 5.4.0)

```
#include <iostream>

using namespace std;

int main() {
    int num;
    cin >> num;
    int a[num];
    for(int i = 0 ; i < num; i++)
        cin >> a[i];

        int x = 0, y = 0;
        int xcount = 0, ycount = 0;

    for(int i = 0; i < num; i++){
    }
}
```

--NORMAL-- 1:1 vim

Provide custom input

COMPILE & TEST SUBMIT

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