Codility_

CodeCheck Report: trainingYCQH9J-3DA

Test Name:

Check out Codility training tasks

Summary Timeline AI Assistant Transcript

Tasks summary

Task	Time spent	Score
ParityDegree C# ⚠	1 min	100%

Total score

Tasks Details

Easy

1. ParityDegree

Find the highest power of 2 that divides N.

Task Score	Correctness	Performance
100%	100%	Not assessed

Task description

A positive integer N is given. The goal is to find the highest power of 2 that divides N. In other words, we have to find the maximum K for which N modulo 2^K is 0.

For example, given integer N = 24 the answer is 3, because 2^3 = 8 is the highest power of 2 that divides N.

Write a function:

```
class Solution { public int solution(int N); }
```

that, given a positive integer N, returns the highest power of 2 that divides N.

For example, given integer N = 24, the function should return 3, as explained above.

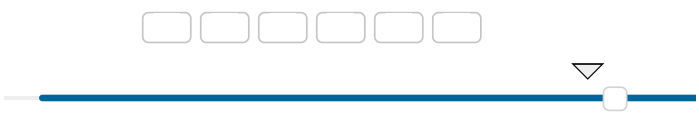
Assume that:

- N is an integer within the range [1..1,000,000,000].

Solution

Programming language used:	C#
Total time used:	1 minutes
Effective time used:	1 minutes
Notes:	*not defined yet*

Task timeline



In your solution, focus on **correctness**. The performance of your solution will not be the focus of the assessment.

Code: 00:43:48 UTC, cs, final, score: **100** show code in pop-up

```
using System;
// you can also use other imports, for example:
// using System.Collections.Generic;

// you can write to stdout for debugging purposes,
// Console.WriteLine("this is a debug message");

class Solution {
    public int solution(int N) {
        // Implement your solution here
        var power = 0;
        int modulo = 0;

        while(modulo == 0)
        {
            power++;
            modulo = N % (int)Math.Pow(2, power);
        }

        return --power;
    }
}
```

Analysis summary

The solution obtained perfect score.

Analysis

expand all	Example tests	
▶	example example test	✓ OK
expand all	**Correctness tests**	
▶	extreme_small N = {1, 2}	✓ OK
▶	small_functional very small numbers	✓ OK
▶	small small numbers	✓ OK
▶	medium medium numbers	✓ OK
▶	medium_powers medium powers	✓ OK
▶	large big numbers	✓ OK
▶	large_powers large powers 2^27, 2^28, 2^29	✓ OK
▶	extreme_maximal N = 10^9	✓ OK