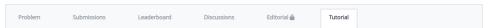
Points: 526.00 Rank: 176524



All topics

- 1 Div Mod
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Div Mod

The modulo operation is one of the most primitive things along with arithmetic operations on integers. a%n or $a \bmod n$ is the remainder when a is divided by n.

if a%m == 0 it means m divides a such that for some multiple k, $a = k.\,m$

Some of the properties are

```
(a+b)\%n = (a\%n + b\%n)\%n
(a \times b)\%n = (a\%n \times b\%n)\%n
```

This operation is very useful when computation involves very large numbers and to check correctness we $usually\ perform\ computation\ under\ modulo\ operation,\ hence\ keeping\ variables\ in\ standard\ integer\ size$ limits.

Modulo operation is also useful useful in the following:

- Chinese Remainder Theorm
- Fast Modulo exponentiation
- Inverse modulo operation

Related challenge for **Div Mod** Sherlock and The Beast **● •** ≡ Success Rate: 82.01% Max Score: 30 Difficulty:

Integer to Array

You are given an integer and you want to perform operations on its digits. In modern scripting languages it can just be done by converting it to a string and then putting the characters into a list.

In order to do this efficiently, we can take all the digits and place them in an array.

```
arr[100] = {0};

i = 0

while ( n != 0) {

    arr[i] = n%10;

    n /= 10;

    i++;
```

This way arr contains all the digits of integer n.

Related challenge for Integer to Array **Modified Kaprekar Numbers ● 9** ≡ Success Rate: 87.31% Max Score: 30 Difficulty: