1134. Armstrong Number Premium

Easy | Topics | Companies | Hint

Given an integer `n`, return `true` *if and only if it is an* ***Armstrong number***.

The `k`-digit number `n` is an Armstrong number if and only if the k^{th} power of each digit sums to `n`.

Example 1:

> **Input:** n = 153
> **Output:** true
> **Explanation:** 153 is a 3-digit number, and 153 = 1^3 + 5^3 + 3^3.

Example 2:

> **Input:** n = 123
> **Output:** false
> **Explanation:** 123 is a 3-digit number, and 123 != 1^3 + 2^3 + 3^3 = 36.

Constraints:

- `1 <= n <= 10^8`

Seen this question in a real interview before? 1/5

Yes No

Accepted **38.4K** | Submissions **49.4K** | Acceptance Rate **77.8%**

Topics

Math

Companies

0 - 6 months

Amazon 2

Hint 1

Check if the given k-digit number equals the sum of the k-th power of it's digits.

Hint 2

How to compute the sum of the k-th power of the digits of a number ? Can you divide the number into digits using division and modulus operations ?

Hint 3

You can find the least significant digit of a number by taking it modulus 10. And you can remove it by dividing the number by 10 (integer division). Once you have a digit, you can raise it to the power of k and add it to the sum.

Discussion (1)