

Problem 1134: Armstrong Number

Problem Information

Difficulty: Easy

Acceptance Rate: 77.89%

Paid Only: Yes

Tags: Math

Problem Description

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 $123 \neq 1^3 + 2^3 + 3^3 = 36$.

Constraints:

`1 ≤ n ≤ 108`

Code Snippets

C++:

```
class Solution {
public:
```

```
bool isArmstrong(int n) {  
  
}  
};
```

Java:

```
class Solution {  
    public boolean isArmstrong(int n) {  
  
    }  
}
```

Python3:

```
class Solution:  
    def isArmstrong(self, n: int) -> bool:
```