

# 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 `kth` 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:
```