Problem 507: Perfect Number

Problem Information

Difficulty: Easy
Acceptance Rate: 46.92%
Paid Only: No
Tags: Math

Problem Description

A [**perfect number**](https://en.wikipedia.org/wiki/Perfect_number) is a **positive integer** that is equal to the sum of its **positive divisors** , excluding the number itself. A **divisor** of an integer `x` is an integer that can divide `x` evenly.

Given an integer `n`, return `true` _if_`n` _is a perfect number, otherwise return_`false`.

Example 1:

Input: num = 28 **Output:** true **Explanation:** 28 = 1 + 2 + 4 + 7 + 14 1, 2, 4, 7, and 14 are all divisors of 28.

Example 2:

Input: num = 7 **Output:** false

Constraints:

* `1 <= num <= 108`

Code Snippets

C++:

```
class Solution {
public:
```

```
bool checkPerfectNumber(int num) {

}
};
```

Java:

```
class Solution {
public boolean checkPerfectNumber(int num) {

}
}
```

Python3:

```
class Solution:
def checkPerfectNumber(self, num: int) -> bool:
```