Problem 2177: Find Three Consecutive Integers That Sum to a Given Number

Problem Information

Difficulty: Medium
Acceptance Rate: 65.06%
Paid Only: No
Tags: Math, Simulation

Problem Description

Given an integer `num`, return _three consecutive integers (as a sorted array)__that**sum** to _`num`. If `num` cannot be expressed as the sum of three consecutive integers, return _an**empty** array._

Example 1:

Input: num = 33 **Output:** [10,11,12] **Explanation:** 33 can be expressed as 10 + 11 + 12 = 33. 10, 11, 12 are 3 consecutive integers, so we return [10, 11, 12].

Example 2:

Input: num = 4 **Output:** [] **Explanation:** There is no way to express 4 as the sum of 3 consecutive integers.

Constraints:

* `0 <= num <= 1015`

Code Snippets

C++:

```
class Solution {
public:
```

```
vector<long long> sumOfThree(long long num) {

}
};
```

Java:

```
class Solution {
public long[] sumOfThree(long num) {

}
}
```

Python3:

```
class Solution:
def sumOfThree(self, num: int) -> List[int]:
```