

Problem 829: Consecutive Numbers Sum

Problem Information

Difficulty: Hard

Acceptance Rate: 42.38%

Paid Only: No

Tags: Math, Enumeration

Problem Description

Given an integer `n`, return _the number of ways you can write_ `n` _as the sum of consecutive positive integers._

Example 1:

Input: n = 5 **Output:** 2 **Explanation:** $5 = 2 + 3$

Example 2:

Input: n = 9 **Output:** 3 **Explanation:** $9 = 4 + 5 = 2 + 3 + 4$

Example 3:

Input: n = 15 **Output:** 4 **Explanation:** $15 = 8 + 7 = 4 + 5 + 6 = 1 + 2 + 3 + 4 + 5$

Constraints:

* `1 <= n <= 10^9`

Code Snippets

C++:

```
class Solution {  
public:
```

```
int consecutiveNumbersSum(int n) {  
}  
};
```

Java:

```
class Solution {  
public int consecutiveNumbersSum(int n) {  
}  
}  
}
```

Python3:

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