Problem 1716: Calculate Money in Leetcode Bank

Problem Information

Difficulty: Easy
Acceptance Rate: 82.25%
Paid Only: No
Tags: Math

Problem Description

Hercy wants to save money for his first car. He puts money in the Leetcode bank **every day**.

He starts by putting in `$1` on Monday, the first day. Every day from Tuesday to Sunday, he will put in `$1` more than the day before. On every subsequent Monday, he will put in `$1` more than the **previous Monday**.

Given `n`, return _the total amount of money he will have in the Leetcode bank at the end of the_`nth` _day._

Example 1:

Input: n = 4 **Output:** 10 **Explanation:** After the 4th day, the total is 1 + 2 + 3 + 4 = 10.

Example 2:

Input: n = 10 **Output:** 37 **Explanation:** After the 10th day, the total is (1 + 2 + 3 + 4 + 5 + 6 + 7) + (2 + 3 + 4) = 37. Notice that on the 2nd Monday, Hercy only puts in $2.

Example 3:

Input: n = 20 **Output:** 96 **Explanation:** After the 20th day, the total is (1 + 2 + 3 + 4 + 5 + 6 + 7) + (2 + 3 + 4 + 5 + 6 + 7 + 8) + (3 + 4 + 5 + 6 + 7 + 8) = 96.

Constraints:

* `1 <= n <= 1000`

Code Snippets

C++:

```cpp
class Solution {
public:
int totalMoney(int n) {


}
};
```

Java:

```java
class Solution {
public int totalMoney(int n) {


}
}
```

Python3:

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