Problem 2769: Find the Maximum Achievable Number

Problem Information

Difficulty: Easy
Acceptance Rate: 91.05%
Paid Only: No
Tags: Math

Problem Description

Given two integers, `num` and `t`. A **number**`x`**** is**achievable** if it can become equal to `num` after applying the following operation **at most** `t` times:

* Increase or decrease `x` by `1`, and _simultaneously_ increase or decrease `num` by `1`.

Return the **maximum** possible value of `x`.

Example 1:

Input: num = 4, t = 1

Output: 6

Explanation:

Apply the following operation once to make the maximum achievable number equal to `num`:

* Decrease the maximum achievable number by 1, and increase `num` by 1.

Example 2:

Input: num = 3, t = 2

Output: 7

Explanation:

Apply the following operation twice to make the maximum achievable number equal to `num`:

* Decrease the maximum achievable number by 1, and increase `num` by 1.

Constraints:

* `1 <= num, t <= 50`

Code Snippets

C++:

```
class Solution {
public:
int theMaximumAchievableX(int num, int t) {

}
};
```

Java:

```
class Solution {
public int theMaximumAchievableX(int num, int t) {

}
}
```

Python3:

```
class Solution:
def theMaximumAchievableX(self, num: int, t: int) -> int:
```