

495. Teemo Attacking

Our hero Teemo is attacking an enemy Ashe with poison attacks! When Teemo attacks Ashe, Ashe gets poisoned for a exactly duration seconds. More formally, an attack at second t will mean Ashe is poisoned during the inclusive time interval $[t, t + \text{duration} - 1]$. If Teemo attacks again before the poison effect ends, the timer for it is reset, and the poison effect will end duration seconds after the new attack.

You are given a non-decreasing integer array `timeSeries`, where `timeSeries[i]` denotes that Teemo attacks Ashe at second `timeSeries[i]`, and an integer `duration`.

Return the total number of seconds that Ashe is poisoned.

Example 1:

- **Input:** `timeSeries = [1,4]`, `duration = 2`
- **Output:** 4
- **Explanation:** *Teemo's attacks on Ashe go as follows:*
 - At second 1, Teemo attacks, and Ashe is poisoned for seconds 1 and 2.
 - At second 4, Teemo attacks, and Ashe is poisoned for seconds 4 and 5.

Ashe is poisoned for seconds 1, 2, 4, and 5, which is 4 seconds in total.

Example 2:

- **Input:** `timeSeries = [1,2]`, `duration = 2`
- **Output:** 3
- **Explanation:** *Teemo's attacks on Ashe go as follows:*
 - At second 1, Teemo attacks, and Ashe is poisoned for seconds 1 and 2.
 - At second 2 however, Teemo attacks again and resets the poison timer. Ashe is poisoned for seconds 2 and 3.

Ashe is poisoned for seconds 1, 2, and 3, which is 3 seconds in total.

Constraints:

- $1 \leq \text{timeSeries.length} \leq 10^4$
- $0 \leq \text{timeSeries}[i], \text{duration} \leq 10^7$
- `timeSeries` is sorted in non-decreasing order.