# Minimum Number of Taps to Open to Water a Garden

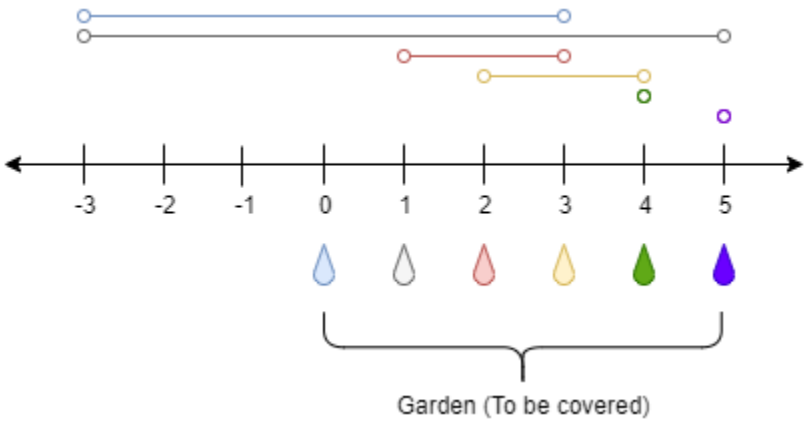
There is a one-dimensional garden on the x-axis. The garden starts at the point 0 and ends at the point n. (i.e The length of the garden is n).

There are n + 1 taps located at points [0, 1, ..., n] in the garden.

Given an integer n and an integer array ranges of length n + 1 where ranges[i] (0-indexed) means the i-th tap can water the area [i - ranges[i], i + ranges[i]] if it was open.

Return *the minimum number of taps* that should be open to water the whole garden, If the garden cannot be watered return **-1**.

**Example 1:**




**Input:** n = 5, ranges = [3,4,1,1,0,0]

**Output:** 1

**Explanation:** The tap at point 0 can cover the interval [-3,3]

The tap at point 1 can cover the interval [-3,5]

The tap at point 2 can cover the interval [1,3]

The tap at point 3 can cover the interval [2,4]

The tap at point 4 can cover the interval [4,4]

The tap at point 5 can cover the interval [5,5]

Opening Only the second tap will water the whole garden [0,5]

**Example 2:**

**Input:** n = 3, ranges = [0,0,0,0]

**Output:** -1

**Explanation:** Even if you activate all the four taps you cannot water the whole garden.

**Constraints:**

- $1 <= n <= 10^4$
- ranges.length == n + 1
- 0 <= ranges[i] <= 100