330. Patching Array

Given a sorted integer array nums and an integer n, add/patch elements to the array such that any number in the range [1, n] inclusive can be formed by the sum of some elements in the array.

Return the minimum number of patches required.

Example 1:

- **Input:** nums = [1,3], n = 6
- **Output:** 1
- **Explanation:**
  - Combinations of nums are [1], [3], [1,3], which form possible sums of: 1, 3, 4.
  - Now if we add/patch 2 to nums, the combinations are: [1], [2], [3], [1,3], [2,3], [1,2,3].
  - Possible sums are 1, 2, 3, 4, 5, 6, which now covers the range [1, 6].
  - So we only need 1 patch.

Example 2:

- **Input:** nums = [1,5,10], n = 20
- **Output:** 2
- **Explanation:** The two patches can be [2, 4].

Example 3:

- **Input:** nums = [1,2,2], n = 5
- **Output:** 0

Constraints:

- 1 <= nums.length <= 1000
- 1 <= nums[i] <= 10^4
- nums is sorted in ascending order.
- 1 <= n <= $2^{31} - 1$