

167. Two Sum II - Input array is sorted

Given a **1-indexed** array of integers `numbers` that is already **sorted in non-decreasing order**, find two numbers such that they add up to a specific `target` number. Let these two numbers be `numbers[index₁]` and `numbers[index₂]` where `1 <= first < second <= numbers.length`.

Return *the indices of the two numbers*, `index₁` and `index₂`, *as an integer array* `[index₁, index₂]` of length 2.

The tests are generated such that there is **exactly one solution**. You **may not** use the same element twice.

Example 1:

Input: `numbers = [2,7,11,15], target = 9`

Output: `[1,2]`

Explanation: The sum of 2 and 7 is 9. Therefore `index₁ = 1`, `index₂ = 2`.

Example 2:

Input: `numbers = [2,3,4], target = 6`

Output: `[1,3]`

Explanation: The sum of 2 and 4 is 6. Therefore `index₁ = 1`, `index₂ = 3`.

Example 3:

Input: `numbers = [-1,0], target = -1`

Output: `[1,2]`

Explanation: The sum of -1 and 0 is -1. Therefore `index₁ = 1`, `index₂ = 2`.

Constraints:

- `2 <= numbers.length <= 3 * 104`
- `-1000 <= numbers[i] <= 1000`
- `numbers` is sorted in **non-decreasing order**.
- `-1000 <= target <= 1000`
- The tests are generated such that there is **exactly one solution**.

```
class Solution:
    def twoSum(self, numbers: List[int], target: int) -> List[int]:
        i = 0
        j = len(numbers)-1

        while i<j:
            temp = numbers[i]+numbers[j]
            if temp==target:
                return (i+1,j+1)
            elif temp>target:
                j = j-1
            else:
                i = i+1
```