

정렬된 배열을 받아 덧셈하여 타겟을 만들 수 있는 배열의 두 숫자 인덱스를 리턴하라.
#주의: 이 문제에서 배열은 0이 아닌 1부터 시작하는 것으로 한다.

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.

1. 투 포인터

class Solution:

```
def twoSum(self, numbers: List[int], target: int) -> List[int]:
    left, right = 0, len(numbers) - 1
    while not left == right:
        temp = numbers[left] + numbers[right]
        if temp < target:
            left += 1
        elif temp > target:
            right -= 1
        else:
            return [left + 1, right + 1]
```

import bisect

class Solution:

```
def twoSum(self, numbers: List[int], target: int) -> List[int]:
    for k, v in enumerate(numbers):
        left, right = k + 1, len(numbers) - 1
        expected = target - v
        i = bisect.bisect_left(numbers[k + 1:], expected)
        if i < len(numbers[k + 1:]) and numbers[k + i + 1] == expected:
            return k + 1, k + i + 2
```

import bisect

class Solution:

```
def twoSum(self, numbers: List[int], target: int) -> List[int]:
    for k, v in enumerate(numbers):
        left, right = k + 1, len(numbers) - 1
        expected = target - v
        nums = numbers[k + 1:]
        i = bisect.bisect_left(nums, expected)
        if i < len(nums) and numbers[k + i + 1] == expected:
            return k + 1, k + i + 2
```

import bisect

class Solution:

```
def twoSum(self, numbers: List[int], target: int) -> List[int]:
    for k, v in enumerate(numbers):
        left, right = k + 1, len(numbers) - 1
        expected = target - v
```

```
i = bisect.bisect_left(numbers, expected, k + 1)
if i < len(numbers) and numbers[i] == expected:
    return k + 1, i + 1
```

2. 이진 검색

class Solution:

```
def twoSum(self, numbers: List[int], target: int) -> List[int]:
```

```
    for k, v in enumerate(numbers):
```

```
        left, right = k + 1, len(numbers) - 1
```

```
        expected = target - v
```

```
        while left <= right:
```

```
            mid = left + (right - left) // 2
```

```
            if numbers[mid] < expected:
```

```
                left = mid + 1
```

```
            elif numbers[mid] > expected:
```

```
                right = mid - 1
```

```
            else:
```

```
                return k + 1, mid + 1
```