

<https://course.acciojob.com/idle?question=f7a7790c-2f0f-49ef-aadb-ee0031f88e28>

MEDIUM

Max Score: 40 Points

## Two Sum in sorted Array

Given an array  $A$  sorted in non-decreasing order, find two numbers such that they add up to a specific `target` number. Let these two numbers be  $A[\text{index1}]$  and  $A[\text{index2}]$  where  $1 \leq \text{index1} < \text{index2} \leq A.\text{length}$ .

Return the indices of the two numbers, `index1` and `index2` in one-based indexing.

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

Your solution must use only constant extra space.

### Input Format

For each test case: The first line contains an integer  $N$  denoting the number of elements and a target element `target`.

The second line contains  $N$  space separated integers denoting the elements of the array  $A$ .

### Output Format

For each test case return an array, containing the index of the required element.

### Example 1

Input

```
4 9
2 7 11 15
```

Output

1 2

Explanation

As 2 and 7 add up to 9, therefore answer is 1 and 2 i.e position of 2 and 7.

## Example 2

Input

3 6  
2 3 4

Output

1 3

Explanation

As 2 and 4 add up to 6, therefore answer is 1 and 3 i.e position of 2 and 4.

## Constraints:

$1 \leq N \leq 10000$

$1 \leq \text{target} \leq 200000$

$1 \leq A[i] \leq 100000$

Topic Tags

Arrays

# My code

```
// in java
import java.util.*;
class Main{
    public static void main(String[] args){
        try (Scanner sc = new Scanner(System.in)) {
            int n=sc.nextInt();
            int target=sc.nextInt();
            int []A=new int[n];
            for(int i=0;i<n;i++){
                A[i]=sc.nextInt();
            }
            Solution ob =new Solution();
            int []ans = ob.twosum(A,n,target);
            System.out.println(ans[0]+" "+ans[1]);
        }
    }
}
```

```
class Solution{

    public int[] twosum(int arr[], int n, int target){
        //Write code here
        for(int i=0;i<arr.length-1;i++)
            for(int j=i+1;j<arr.length;j++){
                if((arr[i]+arr[j])==target)
                {
                    return new int[] {i+1 , j+1 };
                }
            }
    }
}
```

```
    }  
    return null;  
  }  
}
```