## Problem 1:

https://leetcode.com/problems/two-sum-ii-input-array-is-sorted/description/ Two pointer approach

```
class Solution(object):
    def twoSum(self, numbers, target):
        #sliding window
        start=0
        end=len(numbers)-1
        while start<end:
            if numbers[start]+numbers[end]==target:
                return [start+1,end+1]
        elif numbers[start]+numbers[end]<target:
                start+=1
        else:
                end==1
        #no alternative as we are guaranteed one solution</pre>
```



Problem 2: https://leetcode.com/problems/product-of-array-except-self/ Sliding window approach

```
class Solution(object):
    def productExceptSelf(self, nums):
        N=len(nums)
        result=[1]*N
        pre=1
        suf=1
        for i in range(N):
            pre*=nums[i]
            if i+1<=N-1:
                result[i+1]*=pre
            else:</pre>
```

```
pass
suf*=nums[N-1-i]
if N-2-i>=0:
    result[N-2-i]*=suf
return result
```



## Problem3:

