**Array**

**Easy**

*Problem 1 :- 1 Two Sum*

*Link:* <https://leetcode.com/problems/two-sum/>

Solution:

Declare a hashmap and traverse each element and check if target – currentelement is present in the hashmap or not

If present store their indexes in an result array/set/list and break there

Else add the element as key and index as value in the hashmap

*Code:* [*https://github.com/Rishi143/DSASheet/blob/master/src/main/java/com/dsa/overall/\_1TwoSum.java*](https://github.com/Rishi143/DSASheet/blob/master/src/main/java/com/dsa/overall/_1TwoSum.java)

*Problem 2 :- 121 Best time to buy and sell stock*

*Link:* <https://leetcode.com/problems/best-time-to-buy-and-sell-stock/>

Solution:

Declare minUntilNow as first element of the array and maxProfit as 0

Traverse everyelement and first check if currProfit which is currentElement – minUntilNow is greater than maxProfit then assign maxProfit as currProfit

Then check if current element is smaller than minUntilNow then assign minUntilNow as current element

After all the elements are traversed then return the maxProfit

*Code:* [*https://github.com/Rishi143/DSASheet/blob/master/src/main/java/com/dsa/overall/\_2BestTimeToBuyAndSellStock.java*](https://github.com/Rishi143/DSASheet/blob/master/src/main/java/com/dsa/overall/_2BestTimeToBuyAndSellStock.java)

*Problem 3: 88 Merge Sorted Array*

Link: <https://leetcode.com/problems/merge-sorted-array/>

Solution:

Declare two pointers m and n such that m is the last non zero index in the array 1 and n is the last element in the array2 and end as last element of array1

Run a while loop m >= 0 && n >= 0 such that if array1[m] > array2[n] then array1[end] is assigned as array1[m] and m,end are decremented

Or else array1[end] is assigned as array2[n] and n,end are decremented

In the end if any of the array2 elements left then array1[end] = array2[n] and end,n are decremented this is done because it fills the remaining elements

*Code:* [*https://github.com/Rishi143/DSASheet/blob/master/src/main/java/com/dsa/overall/\_3MergeSortedArray.java*](https://github.com/Rishi143/DSASheet/blob/master/src/main/java/com/dsa/overall/_3MergeSortedArray.java)

*Problem 4: 283 Move Zeroes*

Link: <https://leetcode.com/problems/move-zeroes/>

Solution: