

1) FIND THE REVERSE OF AN ARRAY. You must do this by modifying the input array in-place with  $O(1)$  extra memory.

Input: [23, 64, 94, 2, 34, 74, 73]

Output: [73, 74, 34, 2, 94, 64, 23]

2) Write a program to find maximum and minimum element of an array. Your program should accept N elements, all integer values then the program should display the minimum and maximum element in the array with their corresponding index number.

Input: [23, 64, 94, 2, 34, 74, 73]

Output: The minimum element is 2 at index 3.

The maximum element is 94 at index 2.

3) Move all negative numbers to beginning and positive to end with constant extra space. Order of elements is not important here.

Input: -12, 11, -13, -5, 6, -7, 5, -3, -6

Output: -12, -13, -5, -7, -3, -6, 11, 6, 5

4) Given an array `nums` with `n` objects colored red, white, or blue, sort them in-place so that objects of the same color are adjacent, with the colors in the order red, white, and blue. We will use the integers 0, 1, and 2 to represent the color red, white, and blue, respectively.

Input: `nums = [2,0,2,1,1,0]`

Output: `[0,0,1,1,2,2]`

## 5) Two sum problem:-

Given an array of integers `nums` and an integer `target`, return indices of the two numbers such that they add up to `target`. You may assume that each input would have exactly one solution, and you may not use the same element twice. You can return the answer in any order.

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

Output: `[0,1]`

Explanation: Because `nums[0] + nums[1] == 9`, we return `[0, 1]`.