# Array

1)Find the Maximum Subarray Sum:

Given an array of integers, find the contiguous subarray (containing at least one number) which has the largest sum and return its sum.

2)Rotate Array:

Rotate an array of n elements to the right by k steps. For example, with n = 7 and k = 3, the array [1,2,3,4,5,6,7] is rotated to [5,6,7,1,2,3,4].

3)Find Missing Number:

Given an array containing n distinct numbers taken from 0, 1, 2, ..., n, find the one that is missing from the array.

4)Merge Two Sorted Arrays:

Given two sorted arrays nums1 and nums2, merge them into a single sorted array.

5)Product of Array Except Self:

Given an array nums of n integers where n > 1, return an array output such that output[i] is equal to the product of all the elements of nums except nums[i].

6)Find Duplicates in an Array:

Given an array of integers, find all the duplicates that exist in the array.

7)Move Zeroes:

Given an array nums, write a function to move all 0's to the end of it while maintaining the relative order of the non-zero elements.

8)Container With Most Water:

Given n non-negative integers a1, a2, ..., an, where each represents a point at coordinate (i, ai), n vertical lines are drawn such that the two endpoints of the line i are at (i, ai) and (i, 0). Find two lines, which, together with the x-axis forms a container, such that the container contains the most water.

9)Spiral Matrix:

Given an m x n matrix, return all elements of the matrix in spiral order.

10)Find Peak Element:

Given an input array nums, where nums[i] ≠ nums[i+1], find a peak element and return its index.