1. Consider an array containing only 2's, 3's, and 5's. Write a program to sort the elements using constant space in linear time. Sorting in a single array traversal is expected (Hint: partitioning algorithm in quick sort).

2. Write a program to implement a recursive sorting algorithm to sort elements in an array, considering that the memory-write operation is very expensive/costly compared to the memory-read operation.

3. You have a sorted array of non-negative integers. Write a program that finds the smallest element not present in the array.