- 1. Perform the union and intersection of two integer arrays. (In UNION, the common elements must come once).
- 2. Given an array of positive integers of size n, find the **minimum repeating** number and its frequency in this array. For example, let the array be $arr[] = \{1, 2, 1, 2, 2, 2, 3, 8, 9, 2, 3, 9\}$, the minimum repeating number is 8. Its frequency is 1
- 3. Given two sorted arrays and a number *x*, find the pair whose sum is equal to *x* and the pair has an element from each array. For example:

Input: arr1[] =
$$\{1, 4, 5, 7\}$$
; arr2[] = $\{10, 20, 30, 40\}$; $x = 31$

Output: 1 and 30

- 4. Given three arrays sorted in non-decreasing order, print all common elements in these arrays.
- 5. Add, subtract, and multiply the elements of two arrays. (The size of the two arrays are same)
- 6. Search an element in an array and count the number of times that element is present.
- 7. Sort the elements of an array both in ascending and descending order. (Use any sorting algorithm you know)
- 8. Reverse the elements of an array without using a 2nd array.