Problem Set 3: (Arrays)

1. **Find Largest element in an array**
2. **Find Smallest Element in an Array**
3. **Find the Smallest and largest element in an array**
4. **Find Second Smallest Element in an Array**
5. **Calculate the sum of elements in an array**
6. **Reverse an Array**
7. **Sort first half in ascending order and second half in descending**
8. **Sort the elements of an array**
9. **Finding the frequency of elements in an array**
10. **Sorting elements of an array by frequency**
11. **Finding the Longest Palindrome in an Array**
12. **Counting Distinct Elements in an Array**
13. **Finding Repeating elements in an Array**
14. **Finding Non-Repeating elements in an Array**
15. **Removing Duplicate elements from an array**
16. **Finding Minimum scalar product of two vectors**
17. **Counting the number of even and odd elements in an array**
18. **Find all Symmetric pairs in an array**
19. **Find maximum product sub-array in a given array**
20. **Finding Arrays are disjoint or not**
21. **Determine Array is a subset of another array or not**
22. **Determine can all numbers of an array be made equal**
23. **Finding Minimum sum of absolute difference of given array**
24. **Rotation of elements of array- left and right**
25. **Finding Circular rotation of an array by K positions**
26. **Balanced Parenthesis Problem**