

Assignment 2:

1. Write a program to calculate the average of the elements in an array.
2. Write a program to count the number of even and odd elements in an array.
3. Write a program that reverses an array and prints it.
4. Write a function to check if an array is sorted in ascending order.
5. Write a program that merges two sorted arrays into one sorted array.
6. Write a program to insert and delete an element at a specified position in an array.
7. Write a program to find all prime numbers in an array.
8. Write a program to perform a binary search on a sorted array.
9. Write a program to find the frequency of each element in an array.
10. Write a program to find the common elements between two arrays.
11. Write a program that shifts all the zeros to the end of an array.
12. Write a program to check if an array is a subset of another array.
13. Write a program to rotate an array left by n positions.
14. Write a program that uses a function to return multiple statistics (mean, median, mode) of an array.
15. Write a program to perform scalar multiplication on a matrix.
16. Write a program to add/ subtract / multiply two matrices.
17. Write a program to transpose a matrix.
18. Write a program to check if a matrix is symmetric/ equal.
19. Write a program that finds the trace (sum of diagonal elements) of a matrix.
20. Write a program to find the determinant of a 2x2 matrix.