Assignment 5

*** Implement the code with good comments and mention the behavior you have noticed and document the same in the code in the form of comment. This part is for logic building. Once the logics are built and analyzed. Use the same for the coding part ***

Analyze
Can we use a[i] or i[a] to access an element, test with some code.

Q1: Write a C program to create an array of 10 integers, initialize the array using user input. Once the array has been initialized, write a function which will check whether a number (user input) is present in the array or not!
->If Number is present in the array, then return the index position of the that number
->If number is not present in that array, then return -1 to calling function.
Print the result in both the cases.

Q2: Write a C program to find the address of a specific element in the given array, implement a function named "findElement()", which should take the array as parameter and should return the address of the element if found or NULL if element is not present.

Q3: WAP to Reverse an array in memory

Q4: WAP to Addition of two arrays

Q5: WAP Polynomial evaluation where coefficients are stored in an array
$a_0x^n+a_1x^{n-1+}a_2x^{n-2}+...+a_n$

Q6: WAP for Addition, Subtraction, Multiplication of two matrices

Q7: WAP for Transpose of a matrix

Q8: WAP for Trace of a matrix

Q9: WAP for Determinant for 2x2 , 3x3 matrices

Q10: WAP to Solving linear equations
a1x+b1y=c1; a2x+b2y=c2
a1x+b1y+c1z=d1; a2x+b2y+c2z=d2; a3x+b3y+c3z=d3

Q11: WAP for Generation of identity, null matrices

Q12: WAP for Checking whether given matrix is identity or not?

Q13: WAP for Checking whether given matrix is null or not?