

- Program to merge two 1-D arrays
- Program to perform operations like addition, multiplication, etc. on matrix
- Write a program to sort 5 string words stored in an array of pointers.
- Write a program to print the following pattern

```

    U N
  U N I V
U N I V E R
U N I V E R S I
U N I V E R S I T Y
U N I V E R S I
U N I V E R
  U N I V
    U N

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// Program for matrix operations like determinant, singular, etc.

1.	Write a program to perform following operations on arrays (i) Inserting an element at specified position (ii) Deleting an element at specified position (iii) Replacing an element at specified position (iv) Searching
2.	Let A and B be two arrays. Write a function to create a new array C that contains elements alternately from A and B beginning with the first element of A. Use pointer to access the elements from the array C. If you run out of elements in one of the lists (arrays), then append the remaining elements of the other list (array) to C.
3.	Create an array called polynomial and perform the following operations: (i) Addition of two polynomials (ii) Subtraction of two polynomials (iii) Multiplication of two polynomials.

4.	Write a program to perform following matrix operations : (i) Addition (ii) Multiplication (iii) Transpose (iv) Inverse (vi) Matrix to lower triangle and upper triangle form (vii) Tri-diagonal elements (viii) Saddle point and also find how many saddle points in the given matrix(minimum in row and maximum in column)																									
5.	A square matrix is a matrix with the same number of rows and columns. Write a program to find the sum of diagonal elements of a square matrix A of size $n \times n$. The program should also determine the given matrix is an upper triangular matrix or not.																									
6.	Write program for big number arithmetic. (Addition, Subtraction and Multiplication)																									
7.	<p>A maze can be represented by a two dimensional Boolean array in which true elements represents walls and false one represents hall-ways. For Example write a program to move a mice through a maze so represented.</p> <table><tr><td>*</td><td>*</td><td>*</td><td></td><td>*</td></tr><tr><td>*</td><td>*</td><td></td><td></td><td>*</td></tr><tr><td>*</td><td></td><td></td><td>*</td><td>*</td></tr><tr><td>*</td><td></td><td>*</td><td>*</td><td>*</td></tr><tr><td>*</td><td></td><td>*</td><td>*</td><td>*</td></tr></table>	*	*	*		*	*	*			*	*			*	*	*		*	*	*	*		*	*	*
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8.	Write a program which calls a recursive function to determine the given string is palindrome or not and also write a recursive function to find the length the given string.																									
9	Write an algorithm and a program to sort an unsorted list of n elements. The program should also displays the number of swapping operations performed for a given list of elements. (Bubble sort, Selection sort and Insertion sort)																									