1. Write a C function that takes two integer variables as arguments and swaps values of these two variables inside it so that the changed values are reflected outside this function.
2. Write a program in C that has a function to calculate the length of the string using a pointer.
3. Write a program in C that takes in a sequence of numbers using pointers and then displays them using pointers as well (you can not use array indexing for I/O).
4. Write a program in C that copies the contents of one array to another array of the same size (you can not use array indexing for any task).
5. Write a C program to print the elements of an array in reverse order using pointers.
6. Write a C program to print the elements of a 2D matrix in row and column major order. Use pointer arithmetic to access the 2D matrix elements.
7. Write a C program to find the position of an element in a 2D matrix. If the number exists more than once in the matrix, print the position of all of its occurrences. Use pointer arithmetic to access the 2D matrix elements.
8. Write a C function that takes a string (char*) as an argument and generates all permutations of that string.
9. Given some integers, find if the sum of the integers at odd positions is greater than or less than or equal to that of those at even positions. You must use pointers to solve this problem. Do not use array indexing. (Assume indexing starts from 0). Take an integer n as input. Next line contains n integers which are the integers to be considered.

Input	Output
3 1 3 1	Odd index sum is greater
4 2 2 4 1	Even index sum is greater
5 2 1 3 5 1	Equal