Home Work-1

Only use pointer variables and pointer arithmetic for handling arrays.

1. Write a function ***reverseString (char *)*** that takes only one argument (a character array or C-style string using char *) and reverses it. The function should modify the values of the original string, and should return nothing.

2. Enter an array of 10 integers and sort the first half in an ascending order and the second half in a descending order using any appropriate sort.

   For example,
   INPUT: 1, 38, 7, 13, 28, 19, 64, 18, 22, 11
   OUTPUT: 1, 7, 13, 28, 38, 64, 22, 19, 18, 11

3. Write a complete C++ code that inputs a character array from a user. After taking input it calls a function ***CountTwo(char *)*** that counts **two letter** words from that string and returns that value to main().

   For example,
   INPUT: My programing skill is excellent by summers.
   OUTPUT: 3

4. Given an array of integers, write a function sumEvenFreqElement that finds the sum of all even occurring elements in the given array. That is the sum of all such elements whose frequency is even in the array. You are not allowed to use array subscript notation. i.e., use pointer arithmetic.

   Example:

   Input: arr[] = { 1, 3, 1, 2, 3, 2, 3 }

   Output: 6

   Input: arr[] = { 10, 40, 30, 40, 20 }

   Output = 80

   The function prototype should be:

   int sumEvenFreqElement(int *array, int size)