

1. Given an unsorted array A of size N of non-negative integers, find a continuous sub-array which adds to the given number

Example:

Input: arr[] = {1, 4, 20, 3, 10, 5}, sum = 33

Output: Sum found between indexes 2 and 4

Input: arr[] = {1, 4, 0, 0, 3, 10, 5}, sum = 7

Output: Sum found between indexes 1 and 4

Input: arr[] = {1, 4}, sum = 0

Output: No subarray found

2. Move all negative numbers to beginning and positive to end

Example:

Input : -12, 11, -13, -5, 6, -7, 5, -3, -6

Output :-12 -13 -5 -7 -3 -6 11 6 5

Note :- Order of elements is not important here

3. Write a program to count number of bits as "1" in an 8 bit number
4. Write a C program that will accept a hexadecimal number as input, and then display a menu that will permit any of the following operations to be carried out
 - a. Display the hexadecimal equivalent of the one's complement
 - b. Carry out a masking operation and then display the hexadecimal equivalent of the result
 - c. Carry out a bit shifting operation and then display the hexadecimal equivalent of the result
 - d. Exit

If the masking operation is selected, prompt the user for the type of operation (bitwise and, bitwise exclusive or, or bitwise or) and then a (hexadecimal) value for the mask. If the bit shifting operation is selected, prompt the user for the type of shift (left to right), and then the number of bits

5. C program contains the following declaration `int x[8]= {10,20,30,40,50,60,70,80};`
Analyze the meaning of below statements
 - a. What is the meaning of x?
 - b. What is the meaning of (x+2)?
 - c. What is the value of *x?
 - d. What is the value of (*x+2)?
 - e. What is the value of *(x+2)?