

Hand written solution needed, added with your thought process, how you have analyzed that problem. Neat white pages, stapled, [name, uni_ID]. Submission date 5/04/2024 → in my office F202.

Question # 1

You have an array A of size N, populated with integer values [-ve, 0, +ve], Not sorted. You have to design a solution that will find two integer values x, y belong to Array A, such that $|x + y|$ should be the maximum [absolute of the sum should be maximum]. For solution you have to think that which two values (x & y) will result in the desired solution. **Your solution should be the efficient one**, thing and then solve the problem.

Question # 2

You have an array A of size N, populated with integer values [-ve, 0, +ve], Not sorted. You have to design a solution that will find two integer values x, y belong to Array A, such that $|x| - |y|$ should be the minimum [subtraction of the two absolute values should be minimum]. For solution you have to think that which two values (x & y) will result in the desired solution. **Your solution should be the efficient one**, thing and then solve the problem.

Question # 3

You have 3 arrays A (size N), B (size M), C (size K) sorted and having integer values. Your task is to combine all the three arrays in 1 single array Arr (size N+M+K) already created.

Rule 1: Final array (Arr) should be in the sorted order when you place the values.

Rule 2: A value that is available in all three arrays should be placed once in the final array, all other occurrences should be neglected.

Rule 3: A value that is available in two arrays should not be placed in the final array.

Your solution should be the efficient one, thing and then solve the problem.

You have to write every question solution as a proper function, with proper function arguments [C++]

```
void find_two_values(int A[], int N, int & x, int & y) //first question proper function with arguments
{
}
```