

Lab 5 – Assignment 3

- **Assignment Deadline: 09 March 2023, 11:59PM**
- **Submission:1) a cpp file with student ID and name, 2) a screenshot of result and code**

Problem: Manipulating 1D Array

- **Problem description**
- Write a program that accepts a sequence of integers. All the input values should be stored in an array. The *alternating sum* of the array elements is calculated and the result is printed. For example, there are 5 elements and their values are 1, 2, 3, 4 and 5, the alternating sum is: $1 - 2 + 3 - 4 + 5 = 3$. In this task, the maximum length of the sequence is 1000. Declare the array with an appropriate size accordingly. Think about the logic using pseudocode first.

- **Sample Input and Output 1:**

Enter a sequence of integer (-999 to finish): <u>1 2 3 4 5 6 7 8 9 -999</u> 5
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- **Sample Input and Output 2:**

Enter a sequence of integer (-999 to finish): <u>1 2 3 4 5 -999</u> 3
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