

C++ Fundamentals – Exam (17 April 2022)

1. Below Average Only

Given an array of integer numbers and its size, you will have to create a program for certain calculations. Your task is to find the average number for the given array then get only the numbers below or equal to that average. Create two sums from these numbers: a sum of the elements on even positions and a sum of the elements on odd positions. Then multiply those sums and print the final product on the console.

Input

- On the **first line** you will receive an **integer number** – the length of the array.
- On the **second line** you will receive a **sequence of integer numbers** – the array.

Output

Print the expected number.

Examples

Input	Output	Comments
7 1 1 1 1 1 1 1	12	The average number of the array is: $(1 + 1 + 1 + 1 + 1 + 1 + 1) / 7 = 7 / 7 = 1$ <i>All numbers are below or equal to the average of the array.</i> Sum of elements on even positions (position 0, 2, 4, 6): 4 Sum of elements on odd positions (position 1, 3, 5): 3 Product: 4 * 3 = 12
8 4 2 1 1 3 15 6 0	24	$(4 + 2 + 1 + 1 + 3 + 15 + 6 + 0) / 8 = 4$ 4 2 1 1 3 15 6 0 Even positions: 8 , Odd Positions: 3 Product: 8 * 3 = 24
2 1 1	1	