Array_Level2_007

Given an array of integers, update every element with multiplication of previous and next elements with following exceptions. a) First element is replaced by multiplication of first and second. b) Last element is replaced by multiplication of last and second last.

Input Format

Input contains the no of elements & array values

Constraints

 $1 \le \text{array_size} \le 10000$

Output Format

print the altered array

Sample Input 0

5 23456

Sample Output 0

6 8 15 24 30

Explanation 0

// We get the above output using following // $arr[] = \{2*3, 2*4, 3*5, 4*6, 5*6\}$