

Minimum number to form the sum even

Given an array, write a program to add the minimum number(should be greater than 0) to the array so that the sum of array becomes even

Input:

The first line of input contains an integer **T** denoting the number of test cases. The first and last line of each test case consists of an integer **n**. Next line of each test case consists of **n** spaced integers.

Output:

Print the minimum number required to the array so that the sum becomes even .

Constraints:

$1 \leq T \leq 100$

$1 \leq n \leq 1000$

$1 \leq a[i] \leq 100000$

Example:

Input:

2

8

1 2 3 4 5 6 7 8

9

1 2 3 4 5 6 7 8 9

Output:

2

1