

Pairwise Sum and Divide



You are given an array of numbers. Let us denote the array with $A[]$. Your task is very simple. You need to find the value returned by the function $\text{fun}(A)$.

```
fun(A)
sum = 0
for i = 1 to A.length
  for j = i+1 to A.length
    sum = sum + Floor((A[i]+A[j])/(A[i]*A[j]))
return sum
```

In short, this function takes all distinct pairs of indexes from the array and adds the value $\left\lfloor \frac{A[i]+A[j]}{A[i] \times A[j]} \right\rfloor$ to the sum. Your task is to find the sum.

Note: $\left\lfloor \frac{A}{B} \right\rfloor$ is the integer division function.

Input Format

The first line contains T , the number of test cases to follow.

Each test case contains two lines: the first line contains N , the size of the array, and the second line contains N integers separated by spaces.

Output Format

The output should contain exactly T lines where the i^{th} line contains the answer for the i^{th} test case.

Constraints

$$1 \leq T \leq 15$$

$$1 \leq N \leq 2 \times 10^5$$

$$1 \leq \text{Sum of } N \text{ over all test cases} \leq 2 \times 10^5$$

$$1 \leq A[i] \leq 10^9$$

Sample Input

```
2
3
4 2 3
3
1 4 1
```

Sample Output

```
0
4
```

Explanation

First Test Case: $\left\lfloor \frac{6}{8} \right\rfloor + \left\lfloor \frac{7}{12} \right\rfloor + \left\lfloor \frac{5}{6} \right\rfloor = 0$

Second Test Case: $\left\lfloor \frac{5}{4} \right\rfloor + \left\lfloor \frac{2}{1} \right\rfloor + \left\lfloor \frac{5}{4} \right\rfloor = 4$