**Problem Statement** **Suggest Edit**

**You are given an array “arr” of N distinct integers. Find the product P with the highest count(C) of quadruples which follow p*q* = *r*s where p,q,r, and s are elements of the array with different indexes(quadruple p*q*=*r*s is the same as r*s*=*p*q). You need to print the product P and count C of quadruples.**

**Note:**

```
If 2 or more products have the same count of quadruples, print the lowest value of
the product i.e if (P1, P2) are the 2 products with the same count of such
quadruples(C1 = C2) then P = min(P1, P2).
If no such quadruple exists(C = 0), print 0.
```

**For example if the given array is [3,4, 6, 2, 1] then the answer would be 6 1.Because there are two products P i.e 6 and 12 which have the highest and same count C of quadruples,i.e C=1Therefore the lowest value of the product P is the answer i.e 6**

**Input Format:**

```
The first line of input contains an integer 'T' representing the number of test
cases or queries to be processed.

Then the test case follows.

The first line of each test case contains integer N denoting the size of the
array.

The second line of each test case contains 'N' single space-separated integers
representing the array elements.
```

**Constraints:**

```
1 <= T <= 100
1 <= N <= 10^2
1 <= arr[i] <= 10^9

Time Limit: 1 sec
```

**Output Format:**

```
For each test case, print two single space-separated integers P, and C, denoting
the value of the product and the count of quadruples respectively, in a single
line.
```

**Sample Input 1:**

```
1
6
2 6 3 4 1 12
```

**Sample Output 1:**

```
12 3
```

**Explanation For Sample 1:**

```
Product = 12, Count = 3
There are a total of 3 quadruples for product 12 in the given array as given below
2 6 and 3 4, (p = 2, q = 6, r = 3 and s = 4).
2 6 and 1 12, (p = 2, q = 6, r = 1 and s = 12).
3 4 and 1 12, (p = 3, q = 4, r = 1 and s = 12).
```

**Sample Input 2:**

```
1
8
7 2 10 1 8 3 9 4
```

**Sample Output 2:**

```
8 1
```

**Explanation For Sample 2:**

```
Product = 8, Count = 1
There is only one quadruple in the given array i.e (p = 2, q = 4, r = 8 and s =
1).
```