Diversify the Array

? Ask Doubt

Time-Limit: 2 sec Score: 0/100 Difficulty :

Memory: 256 MB Accepted Submissions: 100 Relevant For: AZ-202 AZ-201

Description

You have given an array A. The diversity of the array A is defined as the number of pairs i, j, $i < j$ such that $A_i \neq A_j$.
You want to maximize the diversity of the array. For that, you are allowed to make at most K operations on it, in any of which, you can select a particular element and change its value to any integer in the range 1 to 10^9, both inclusive.
Find out the maximum diversity of the array that you can obtain.

Input Format

The first line will contain T, number of test cases. Then the test cases follow.
The first line of each test case contains two integers N, K. where N denotes the length of array A.
The next line of each test case contains N space-separated integers, the i-th of which denotes A_i.

Output Format

For each test case, output in a single line, the answer corresponding to the test case, which should be an integer denoting the maximum possible diversity.

Constraints

$1 \leq T \leq 20$
$0 \leq K \leq 10^9$
$2 \leq N \leq 10^5$
$1 \leq A_i \leq 10^9$

Sample Input 1

Copy

```
3
3 10
1 2 3
4 2
1 1 2 2
6 2
2 3 3 2 4 4
```

Sample Output 1

Copy

```
3
6
14
```

C++14[GCC]

Submit

```
1
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