Galactic Convergence

Problem ID: galacticconvergence

Time Limit: 1 second
Memory Limit: 256 MB

You are the captain of a spaceship navigating through a galaxy of stars. Each star has a certain level of energy, represented by an array $a_1, a_2, \ldots, a_n$, where each number represents the energy of a star.
The mission is to balance the energy across all stars. You can perform the following operation at most $n - 1$ times:
Let m be the current number of stars. You can select any two adjacent stars where the previous one has less or equal energy than the latter (in particular, the last star and the first star are adjacent). After selecting two stars, you must remove one of them. In other words, choose an index i ($1 \leq i \leq m$) such that $a_i \leq a_{(i \mod m)+1}$, and delete either star i or star $(i \mod m) + 1$.
Your goal is to make the energy levels of all stars equal. What is the minimum number of operations you need to achieve this?

Input

Each test case consists of the following:

- The first line contains a single integer t ($1 \leq t \leq 500$) — the number of test cases.
- For each test case, the description follows:
  - The first line contains a single integer n ($1 \leq n \leq 100$) — the number of stars.
  - The second line contains n integers $a_1, a_2, \ldots, a_n$ ($1 \leq a_i \leq n$) — the energy levels of the stars.

Output

For each test case, output a single line containing an integer: the minimum number of operations needed to make the energy levels of all stars equal.

Sample

Sample Input 1	Sample Output 1
2 1 1 8 8 7 6 3 8 7 6 3	0 6

Sample Input 2	Sample Output 2
2 6 2 3 2 5 6 2 6 5 4 6 1 4 6	3 4