CODEFORCES
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HOME   TOP   CATALOG   CONTESTS   GYM   PROBLEMSET   GROUPS   RATING   EDU   API   CALENDAR   HELP

PROBLEMS   SUBMIT CODE   MY SUBMISSIONS   STATUS   HACKS   STANDINGS   CUSTOM INVOCATION

C. Make Equal Again

time limit per test: 2 seconds
memory limit per test: 256 megabytes
input: standard input
output: standard output

You have an array a of n integers.

You can **no more than once** apply the following operation: select three integers i, j, x ($1 \le i \le j \le n$) and assign all elements of the array with indexes from i to j the value x. The price of this operation depends on the selected indices and is equal to $(j - i + 1)$ burles.

For example, the array is equal to $[1, 2, 3, 4, 5, 1]$. If we choose $i = 2$, $j = 4$, $x = 8$, then after applying this operation, the array will be equal to $[1, 8, 8, 8, 5, 1]$.

What is the least amount of burles you need to spend to make all the elements of the array equal?

Input

The first line contains a single integer t ($1 \le t \le 10^4$) — the number of input test cases. The descriptions of the test cases follow.

The first line of the description of each test case contains a single integer n ($1 \le n \le 2 \cdot 10^5$) — the size of the array.
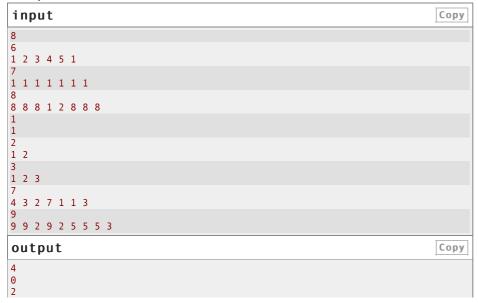
The second line of the description of each test case contains n integers $a_1, a_2, \ldots, a_n$ ($1 \le a_i \le n$) — array elements.

It is guaranteed that the sum of n for all test cases does not exceed $2 \cdot 10^5$.

Output

For each test case, output one integer — the minimum number of burles that will have to be spent to make all the elements of the array equal. It can be shown that this can always be done.

Example

```
input
8
6
1 2 3 4 5 1
7
1 1 1 1 1 1 1
8
8 8 8 1 2 8 8 8
1
1
2
1 2
3
1 2 3
7
4 3 2 7 1 1 3
9
9 9 2 9 2 5 5 5 3
```

```
output
4
0
2
```

```
0
1
2
6
7
```

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