

2. Minimum Average Difference

給定一個長度為 n 的非負整數數組 `nums`。索引(index) i 的平均差值是 `nums` 的前 $i+1$ 個元素的平均值與最後 $n-i-1$ 個元素的平均值之間的絕對差值。兩個平均值都應無條件捨去到最接近的整數。返回具有最小平均差的索引(index)。如果有多個這樣的索引(index)，則返回最小的一個。

Input

輸入的第一列有一個整數代表共有多少筆測資。

每筆測資第一個數字代表陣列有幾個元素 n ，後面的數字代表陣列 `nums` 的元素

Output

最小平均差的索引

Sample input:

```
2
6 2 5 3 9 5 3
1 0
```

Sample output:

```
3
0
```

Explanation:

- The average difference of index 0 is:
 $|2 / 1 - (5 + 3 + 9 + 5 + 3) / 5| = |2 / 1 - 25 / 5| = |2 - 5| = 3.$
 - The average difference of index 1 is:
 $|(2 + 5) / 2 - (3 + 9 + 5 + 3) / 4| = |7 / 2 - 20 / 4| = |3 - 5| = 2.$
 - The average difference of index 2 is:
 $|(2 + 5 + 3) / 3 - (9 + 5 + 3) / 3| = |10 / 3 - 17 / 3| = |3 - 5| = 2.$
 - The average difference of index 3 is:
 $|(2 + 5 + 3 + 9) / 4 - (5 + 3) / 2| = |19 / 4 - 8 / 2| = |4 - 4| = 0.$
 - The average difference of index 4 is:
 $|(2 + 5 + 3 + 9 + 5) / 5 - 3 / 1| = |24 / 5 - 3 / 1| = |4 - 3| = 1.$
 - The average difference of index 5 is:
 $|(2 + 5 + 3 + 9 + 5 + 3) / 6 - 0| = |27 / 6 - 0| = |4 - 0| = 4.$
- The average difference of index 3 is the minimum average difference so return 3.
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- The only index is 0 so return 0.
 - The average difference of index 0 is: $|0 / 1 - 0| = |0 - 0| = 0.$