

Problem statement[Send feedback](#)

You are given an array/list 'ARR' of integers of length 'N'. You are supposed to find all the elements that occur strictly more than $\text{floor}(N/3)$ times in the given array/list.

Detailed explanation (Input/output format, Notes, Images)

Constraints :

1 \leq T \leq 100
3 \leq N \leq 5000
1 \leq ARR[i] \leq 10^5

Time Limit: 1 sec

Sample Input 1 :

2
7
3 2 2 1 5 2 3
5
7 4 4 9 7

Sample Output 1:

2
4 7

Explanation of Sample Input 1:

In the first test case, $\text{floor}(N/3) = \text{floor}(7/3)$ is equal to 2, and 2 occurs 3 times which is strictly more than $N/3$. No other element occurs more than 2 times.

In the second test case, $\text{floor}(N/3) = \text{floor}(5/3)$ is equal to 1, and 4 and 7 both occur 2 times. No other element occurs more than once.

Sample Input 2:

2
6
1 2 4 4 3 4
4
6 6 6 7

Sample Output 2:

4
6

Explanation of Sample Input 2:

In the first test case, $\text{floor}(N/3) = \text{floor}(6/3)$ is equal to 2, and 4 occurs 3 times which is strictly more than $N/3$. No other element occurs more than 2 times.

In the second test case, $\text{floor}(N/3) = \text{floor}(4/3)$ is equal to 1, and 6 occurs 3 times. No other element occurs more than once.