# Problem A. Mode

| | |
|---|---|
| Input file: | *standard input* |
| Output file: | *standard output* |
| Time limit: | 3 seconds |
| Memory limit: | 1024 mebibytes |

You are given an array $a$ of length $n$. Define $cnt_x$ as the number of occurrences of $x$ in $a$.

Now you can do the following operation **at most once**: select a non-empty subarray $a_l, a_{l+1}, a_{l+2}, \ldots, a_r$ and an integer $k \in [-10^9, 10^9]$, and add $k$ to all the elements in the subarray.

Your first task is to find the maximum possible value of $W = \max\{cnt_x \mid x \in \mathbb{Z}\}$ after one operation. Your second task is to find all $v$ such that $cnt_v = W$ can be achieved after one operation.

## Input

The first line contains an integer $T$ ($1 \le T \le 20$), the number of test cases.

Each test case consists of two lines. The first line contains a single integer $n$ ($2 \le n \le 2 \cdot 10^5$), and the second line contains $n$ integers denoting the array ($1 \le a_i \le 10^9$).

It is guaranteed that $\sum n \le 5 \cdot 10^5$, and $a_i$ are not all the same.

## Output

For each test case, output one integer on the first line, denoting the maximum value $W$. Then for all integers $v$ satisfying the condition, output them in ascending order.

## Example

| standard input | standard output |
|---|---|
| 4 | 4 |
| 5 | 1 |
| 1 2 3 2 1 | 5 |
| 5 | 1 |
| 1 1 3 1 1 | 4 |
| 6 | 2 |
| 2 4 2 4 8 8 | 4 |
| 5 | 8 |
| 1 2 3 4 5 | 2 |
| | 1 |
| | 2 |
| | 3 |
| | 4 |
| | 5 |

## Note

The values of $W$ for the test cases are 4, 5, 4, 2.