**Утегенов Батырхан Елембетұлы [ADS-Lab-03]: Submit a solution**

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## Submit a solution for F-Win me if you can!

| | |
|---|---|
| Time limit: | 1 s |
| Real time limit: | 5 s |
| Memory limit: | 256M |

### Problem F: Win me if you can!

Mark is going to fight for Fight Club. There were $N$ competitors with different powers. There will be $P$ rounds to fight and in each round Mark's power will be changed. With power $M$, Mark can kill all the competitors whose power is equal to or less than his. Round by round, all the competitors who are dead in the previous round will be reborn. Such that in each round there will be $N$ competitors to fight. As Mark is tired, please, help him to count the number of competitors that he can win in each round and the total sum of their powers.

### Input format

The first line contains an integer $N$ ($1 \leqslant N \leqslant 10^6$) - the number of competitors without Mark. Next line contains $N$ integers $a_i$ ($1 \leqslant a_i \leqslant 10^3$) - powers these competitors. The third line contains one integer $P$ ($1 \leqslant N \leqslant 10^6$) number of rounds. Each of the next $P$ lines contains an integer $p_i$ ($1 \leqslant a_i \leqslant 10^3$) power of Mark at each round.

### Output format

On each of the $P$ lines print one integer - how many competitors Mark will win and the sum of their powers.

### Examples

**Input**

```
7
7 9 1 8 2 6 2
2
4
8
```

**Output**

```
3 5
6 26
```

## Submit a solution

Language:      g++ - GNU C++ 11.4.0 ▾

[                                                                    ]

File        Choose File   No file chosen
Send!       Send!

## Previous submissions of this problem

| Run ID | Time | Size | Problem | Language | Result | Failed test | View source | View report |
|--------|------|------|---------|----------|--------|-------------|-------------|-------------|
| 5266 | 893:20:19 | 812 | F | g++ | OK | N/A | View | View |

| A | B | C | D | E | F | G | H | I | J | K |