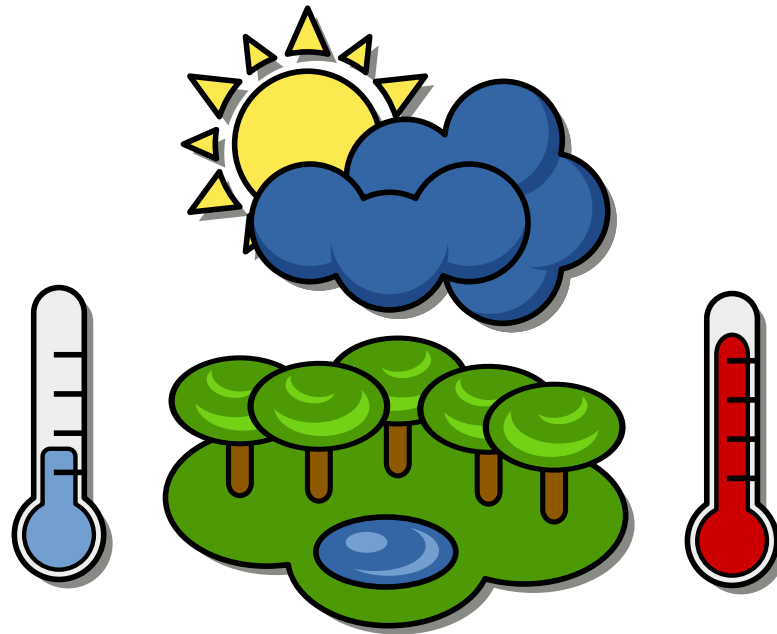


E: Extreme Temperatures

Time limit: 1 second



Kristen is a meteorologist, who is monitoring extreme temperatures in the forest of Palaiseau. She has collected temperature measurements at various times over several days. Help her find out what the lowest and highest temperatures were in her entire dataset.

Input

The input is formed of N lines, each line i with $1 \leq i \leq N$ being a space-separated list of k_i tokens:

- the first token is the date of the measurement, in the form YYYY-MM-DD;
- for $2 \leq j \leq k_i$, the j -th entry is an integer temperature measurement t_{ij} .

Limits

- $1 \leq N \leq 1\,000$;
- $2 \leq k_i \leq 100$ for $1 \leq i \leq N$;
- $-50 \leq t_{ij} \leq 50$ for $1 \leq i \leq N$ and $2 \leq j \leq k_i$.

Output

The output should contain a single line with two integers: the lowest and highest temperatures in the entire dataset, in this order.

Sample Input

```
2020-01-15 5 4 6 8 12 13 12 9 7
2020-01-16 6 3 4 6 10 12 11 7
```

Sample Output

```
3 13
```