Problem D
Instant Noodles

Input File: *testdata.in*
Time Limit: 3 seconds

Problem Description

The one who buys and eats a bag of instant noodles everyday is known as a heavy instant-noodle consumer. A market research organization is studying the market of the heavy instant-noodle consumer. It is found that p_{ij} percent of the heavy instant-noodle consumer who buys a bag of instant noodles of brand i today will buy a bag of instant noodles of brand j tomorrow, where $p_{ij} > 0$ and $\sum_{j=1}^{n} p_{ij} = 1$ with n the number of brands of instant noodles. Specifically, if the percentage of this market commanded by brand i is x_i today, then the market share of brand i will become $\sum_{j=1}^{n} p_{ji}x_j$ tomorrow.

Given n, and p_{ij}, $i, j = 1, 2, ..., n$, can you rapidly determine which brand of instant noodles will be the best selling with respect to this market and calculate the percentage of this market which will be commanded by the best-selling brand of instant noodles?

Technical Specifications

1. The number of brands would be less than or equal to 500.
2. The brand index is between 1 and n.
3. There will be only one most popular brand in the future and the difference between the market shares of the most popular brand and the second most popular brand will be significant.

Input Format

The first line of the input file contains the integer n, the number of brands, followed by $n \times n$ lines, where each line contains p_{ij} in the format $i : j : p_{ij}$ with p_{ij} having at most four digits after the decimal point.

Output Format

Print a line containing two integer numbers with a space between them. The first number is the index of the best-selling brand of instant noodles, and the second number is the percentage, which is rounded to the nearest integer, of the market commanded by the best-selling brand of instant noodles.

Sample Input

```
3
1:1:0.3
1:2:0.35
1:3:0.35
2:1:0.6
2:2:0.3
2:3:0.1
3:1:0.4
3:2:0.3
3:3:0.3
```

Sample Output

```
1 42
```