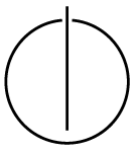

EX1(B): Meeting Point

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`Deadline: 17.05.2023 11:00 CET`

Problem description

Person A and Person B live in affine subspaces of $\mathbb{R}^m$. They want to meet to enjoy a couple of bottles of Spezi. You are to write a program to propose them a point in space where they can meet. I

As an input, you receive m - the dimension of the space. Then, for each person, you receive a list of landmarks in their subspaces, preceded by their number. It is guaranteed that the landmarks span each person's whole subspace.

As an output, first write `Y/N` to indicate whether there is a point in space where they can meet. If such a point exists, output it as well. If there is more than one such point, output any.

Sample input/output

Sample input and output for this problem:

Input	Output
4 3 house 0 0 0 0 shop 0 0 1 0 university 0 1 0 0 4 house 0 3 8 0 backery 0 1 2 5 university 0 3 3 1 gas_station 0 -2 1 1	Y 0 1 1 0
3 2 house 0 0 0 shop 0 1 1 2 university 0 1 0 house 0 0 1	Y 0 0.5 0.5
3 2 house 0 0 0 shop 0 1 1 2 university 1 1 0 house 1 0 1	N