

Winner

Your task is to implement a program that displays which football team have never lost in the tournament.

Input

The first line is integer n which is number of matches

The next n line are results of the matches which are 2 team names in String format separated by a space (the first team is the winner and the second team is the loser)

Output

A list of teams that have never lost, ordered alphabetically by team name.

(You can use `print(sorted(winner))` when `winner` is a list of teams that have never lost)

Example

Input (from keyboard)	Output (on screen)
5 Chelsea Liverpool ManU Liverpool Liverpool ManU Chelsea Arsenal Everton ManCity	['Chelsea', 'Everton']
1 Liverpool WestHam	[' Liverpool ']
4 Arsenal ManCity Arsenal Everton Arsenal Tottenham ManCity Arsenal	[]