Winner

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

Input

The first line is an integer n, which is number of matches

The next n lines are results of the matches which are 2 team names in String format separated by a space (the first team is the winner and 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','Everton']
Chelsea Liverpool	
ManU Liverpool	
Liverpool ManU	
Chelsea Arsenal	
Everton ManCity	
1	['Liverpool']
Liverpool Westham	
4	[]
Arsenal ManCity	
Arsenal Everton	
Arsenal Tottenham	
ManCity Arsenal	