11. Rose Petals

Program Name: Roses.java Input File: roses.dat

Many people have used pulling petals off roses and tossing them in the air to determine if someone loves them or not. Jane wants to use roses to determine which one of several suitors she will let take her to the prom.

You are to write a program to simulate her decision and determine her prom date. The simulation will work as follows:

- She has a number of roses and she knows how many petals are on each rose.
- The suitors are numbered from 1 to n, where n is the number of suitors.
- She will select one rose and give one petal to suitor #1 and continuing successively through suitors until she runs out of petals. When she reaches the end of the list, she begins over with the beginning of the list.
- The person who gets the last petal is eliminated from consideration.
- She gets another rose and continues the process beginning with the suitor after the one that was eliminated.
- She continues this process until there is only one suitor left he is her date for the prom.

Input

The first line will contain a single integer n that indicates the number of test cases to be played. For each test case, there are 2 lines. The first line is the list of the first names of the suitors, separated by a comma and a space. The second line has the number of petals on each of the roses separated by a space. The first rose will be used to find the first suitor to be eliminated, the second rose will be used to find the second person to be eliminated, etc. Note: There is one less rose than suitors.

Output

For each test case, you will display the order of the persons eliminated as LOSER name, one per line, with the final line naming the winner as WINNER name as shown below. Place whitespace between test cases.

Example Input File

1 ALAN, BRYAN, CHAD, DUKE, ERIC, FRED 100 234 564 234 1231

Example Output to Screen

LOSER DUKE
LOSER BRYAN
LOSER ALAN
LOSER FRED
LOSER CHAD
WINNER ERIC