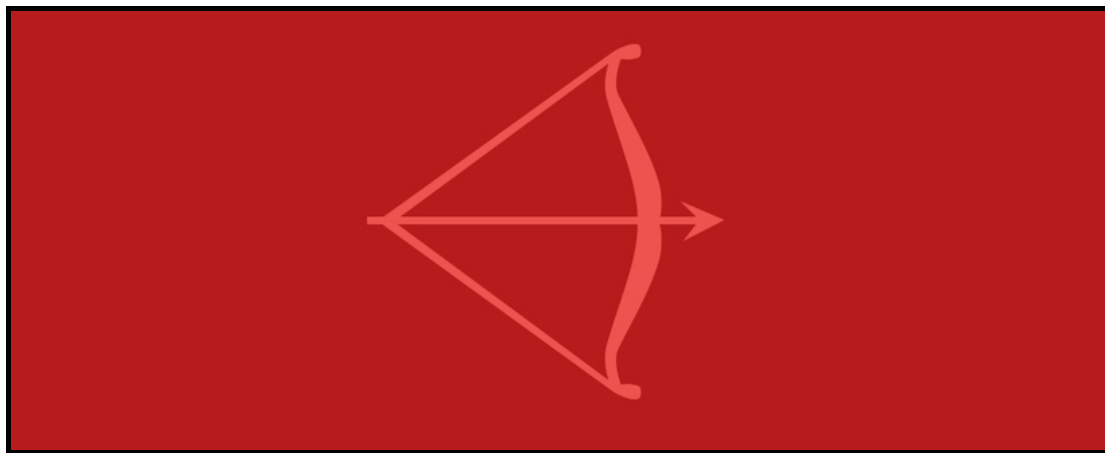




Mr. Cupido



As you might have learned from experience in real life, loving someone doesn't necessarily mean that they love you back. This principle also applies to this problem.

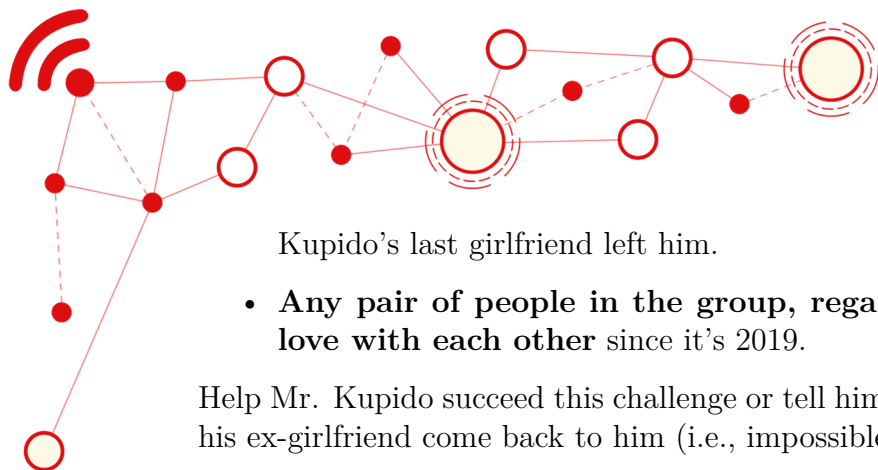
Mr. Cupido can shoot his arrow at people to make them fall in love with a person of his choosing. But this power does not work for himself. This is why he wasn't able to do anything when his girlfriend left him for someone else.

While he was binge watching TV series by himself, Mr. Cupido received a challenge from an anonymous shady entity. The challenge is as follows:

- He must choose a group of N people, all of whom initially do not love each other. He can choose the number N .
- He must make at least one person fall in love with exactly a other people in the group.
- He must make at least one person fall in love with exactly b other people in the group.
- Each person in the group must be either in love with exactly a other people in the group, or exactly b other people in the group.
- For any pair of people in the group, one of them must be in love with the other.
- None of the pairs of people in the group must be in love with each other.

We clarify the following things:

- **Whenever we talk about pairs of people, we mean them to be two different people.** Two different people—just like how Mr. Cupido's last girlfriend seemed towards the end of their rocky relationship.
- **It is possible for a person to fall in love with multiple people at the same time.** This may or may not be related to the reason why Mr.



PRACTICE

Kupido's last girlfriend left him.

- **Any pair of people in the group, regardless of gender, can fall in love with each other** since it's 2019.

Help Mr. Kupido succeed this challenge or tell him that it is as possible as making his ex-girlfriend come back to him (i.e., impossible).

Input Format

The first line of input contains t , the number of test cases.

Each test case consists of a single line containing two space-separated integers a and b .

Output Format

For each test case, first print either YES or NO on a single line denoting whether Mr. Kupido can succeed the challenge. In addition, if you printed YES, you need to show how it can actually be done. First, output a single line containing the integer N Mr. Kupido should choose. Then, output N more lines, where the i th line contains a string of length n , and the j th character of the i th line must be:

- \ if $i = j$,
- L if $i \neq j$ and i loves j ,
- . if $i \neq j$ and i doesn't love j .

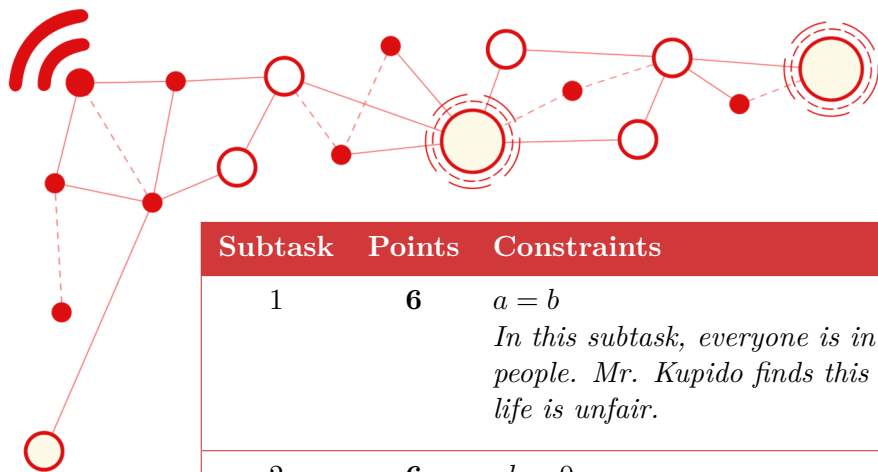
This configuration must satisfy the constraints above. If there are multiple possible configurations, any one will be accepted.

The sum of N^2 across all test cases must be at most $1.5 \cdot 10^7$.

Constraints and Subtasks

For all subtasks

$1 \leq t \leq 300$
 $0 \leq a, b \leq 100$



PRACTICE

Subtask	Points	Constraints
1	6	$a = b$ <i>In this subtask, everyone is in love with the same number of people. Mr. Kupido finds this unrealistic because he thinks that life is unfair.</i>
2	6	$ab = 0$ <i>In this subtask, some people are not in love with anyone. Or maybe they just realize it when it's already too late, as in the case of Mr. Kupido with his girlfriend.</i>
3	6	$ab \leq \max(a, b)$
4	9	$a, b \leq 3$
5	19	$a, b \leq 5$
6	37	$a < b/2$
7	17	No additional constraints.

Sample I/O

Input	Output
1	YES
1 3	4
	\. .L
	L\LL
	L.\.
	. .L\

Explanation

There is no explanation. Just like when Mr. Kupido's girlfriend left him.