Efficiency Overload

A major car company has decided to target Manhattan as their next customer market. Seeing as there are no highways or long distances in Manhattan, they decided to rewrite the way they do efficiency. Normally, they would simply use MPG (miles per gallon) as a quick-and-easy way to display how efficient a car is. Instead of taking normal miles, why not make it Manhattan miles? This way, when a car goes from point A to point B, they use Manhattan distance instead of the normal distance equation. Seeing as the streets of Manhattan are simply a grid, this should be a very easy task to do. Since there are a lot of different ways to get from point A to point B in Manhattan, the company only wants to include trips that used the shortest path possible in their data. All you need to do is let them know which trips took a longer path than necessary. They will handle the rest.

Input

Input begins with a single integer T, the number of trips the company has recorded. On each of the next T lines is a single string of characters. These characters will be either U (for going up), D (for going down), L (for going left) or R (for going right). This represents the path the car took to get from point A to point B. This path will be no longer than 100000 characters.

Output

Output one line per trip, saying either "Success!" if the trip was the shortest length possible, or "Just won't do." if the trip was longer than necessary (without the quotes).

Sample Input

3
RRRR
UUUR
LUUR

Sample Output

Success!
Success!
Just won't do.