In this task you will get a set of instructions to get from a home location to a destination location. You have to give the instructions which begin at the destination location and return to the home location. In other words you need to reverse the directions. Sometimes a mistake will made with the directions, meaning that the latest direction should be deleted. The possible set of directions is “Go North”, Go South, Go East and Go West. Another possible instruction is Go Back which means to undo the latest step. The instruction “Arrived means the sequence of directions is complete. The wat to solve this problem is to push all the instructions onto the stack, pop when you get Go Back and then pop them all off at the end (flipping North <-> South and East <-> West) to have a reversed set of instructions to get you home.

You can copy and paste the code from a Stack class from the notes and alter it to work with Strings (or maybe use chars or ints if you want to represent the instructions in a different format).

NOTE: You will never be asked to Go Back without at least 1 previous valid destination.

Input Format

A sequence of n lines which can consist of Go North Go South Go West Go East Go Back Arrived

Output Format

A reversed set of instructions, each instruction on a separate line, which can consist of Go North Go South Go East Go West.