A Human Resources department in the company ABC Corp. He strongly believes that experience of the employees is invaluable to the company. For this reason, when ABC Corp. is having difficult times and they have to let some employees go, he thinks the employee that was hired most recently should be laid off first.

However, John Smith is too busy with other tasks so he doesn’t make the decisions for the layoffs.

Nevertheless, to make sure the layoff decisions are taken according to his principles so he would like to have a program that keeps track of the hired and laid off employees to make sure the more experienced employees are let go later than the recent hires. He hires you for this job.

Write a program in C/C++ that reads the number of HR operations that took place, then the id of the employee, preceded by the character plus “+” or minus “-“ signs depending on whether they were hired or laid off. To save the employee information**, use a stack.**

If the hiring/lay off decisions were conducted in accordance with the HR principles, your program should output “Pass”, otherwise should output “Fail”. For this question, assume the working conditions at the ABC Corp are stellar and no one resigns from the company voluntarily.

Use the starter code provided.

**An example of your output should look like:**

Enter the number of HR operations:

5

Input the operations and IDs:

+10

+20

+30

-30 -20

PASS