Problem A

Time travel

Suppose you had a time machine that could be used at most three times. Each time you could choose to go back to the past or go to the future. The machine has three fixed credits, which are a certain amount of years. You can travel once, twice or three times, and each credit can be used only once. For example, if the credits were $5, 12$ and 9, you could decide to travel twice: go 5 years to the future and then come back 9 years to the past. This way, you would end up four years in the past, in 2012. You could also travel three times, all to the future, using the credits in any order, ending up in 2042.

In this problem, given the values of the three credits, your program must decide if it is possible, or not, to travel in time and come back to the present, using at least one credit and, at most, three credits; always using each one of the three credits only once.

Input

The only line of the input contains three integers A, B and C ($1 \leq A, B, C \leq 1000$), representing the credit values.

Output

Output one line containing the character "`S`" if it is possible to travel in time and come back to the present, or "`N`" otherwise.

Examples

Examples

Input	Output

`22 5 22`
`31 110 79`
`45 8 7`
	`S`
	`S`
	`N`