Problem B. Boys and Girls

Input file:	boysgirls.in
Output file:	boysgirls.out
Time limit:	2 seconds
Memory limit:	256 megabytes

Bob found a nice task in his old math book for children. It says:

> There are 10 children standing in a circle, 5 of them stand next to a boy, and 7 of them stand next to a girl. How is it possible?

Here is the solution to the task. If 4 boys and 6 girls stand like this: BGBGBGBGGG, there are 5 children who stand next to a boy (here they are underlined: BGBGBGBGGG), and 7 children who stand next to a girl (BGBGBGBGGG).

Now Bob wants to solve a generalized version of this task:

> There are n children standing in a circle, x of them stand next to a boy, and y of them stand next to a girl. How is it possible?

Help Bob by writing a program that solves the generalized task.

Input

The single line of the input contains three integers n, x and y ($2 \le n \le 100\,000$; $0 \le x, y \le n$).

Output

If there is a solution, output a string of length n, describing the order of children in the circle. Character 'G' corresponds to a girl, character 'B' corresponds to a boy. If there are several solutions, output any of them.

If there is no solution, output "Impossible".

Examples

boysgirls.in	boysgirls.out
10 5 7	BGBGBGBGGG
10 3 8	Impossible