Covid - 20?

Problem Description

A lab was trying to synthesize a new virus. They had 1 cell of that virus in a vial on day 1.

The virus starts giving birth to a new cell every day after B days and it also dies after C days.

On a new day, the cell will die (if it is supposed to die) before it gives birth to new cells.

Find the number of virus cells in the vial after A days.

Note : Since, the answer can be very large, output the answer modulo $10^9 + 7$.

Problem Constraints

$1 <= A <= 10^5$
$1 <= B <= A$
$B < C <= A$

Input Format

The first argument is the integer A.

...cond argument is the integer B.

...nt is the integer C.