2327. Number of People Aware of a Secret

Description

On day `1`, one person discovers a secret.

You are given an integer `delay`, which means that each person will **share** the secret with a new person **every day**, starting from `delay` days after discovering the secret. You are also given an integer `forget`, which means that each person will **forget** the secret `forget` days after discovering it. A person **cannot** share the secret on the same day they forgot it, or on any day afterwards.

Given an integer `n`, return *the number of people who know the secret at the end of day* `n`. Since the answer may be very large, return it **modulo** `10^9 + 7`.

Example 1:

```
Input: n = 6, delay = 2, forget = 4
Output: 5
Explanation:
Day 1: Suppose the first person is named A. (1 person)
Day 2: A is the only person who knows the secret. (1 person)
Day 3: A shares the secret with a new person, B. (2 people)
Day 4: A shares the secret with a new person, C. (3 people)
Day 5: A forgets the secret, and B shares the secret with a new person, D. (3 people)
Day 6: B shares the secret with E, and C shares the secret with F. (5 people)
```

Example 2:

```
Input: n = 4, delay = 1, forget = 3
Output: 6
Explanation:
Day 1: The first person is named A. (1 person)
Day 2: A shares the secret with B. (2 people)
Day 3: A and B share the secret with 2 new people, C and D. (4 people)
Day 4: A forgets the secret. B, C, and D share the secret with 3 new people. (6 people)
```

Constraints:

- `2 <= n <= 1000`
- `1 <= delay < forget <= n`