CPT Elections

André and Bertrand are campaigning to become the new CPT president. After a long campaign André was able to quench victory, recieving **N** votes to Bertrand’s **M** votes.

Reyno noticed that as the votes were tallied, an interesting pattern emerged. André received the first **K** votes and at every point of the tally, he was at least **K** votes ahead of Bertrand.

Reyno, always a fan of enumeration, wondered to himself: in how many ways could the tally have played out such that the above condition holds? Rather than solving it himself, he has enlisted your help. Don’t let him down!

**Input**

Each test case contains three integers **N, M, K** (1 ≤ **M** < **N** ≤ 106, 0 ≤ **K** ≤ **N** - **M**).

For 70% of the cases, **N** ≤ 1,000.

**Output**

For each test case, output the number of ways the voting could have played out, modulo 1,000,000,007.

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| **Sample Input 1:**  2 1 0 | **Sample Output 1:**  2 |
| **Sample Input 2:**  6 5 0 | **Sample Output 2:**  132 |
| **Sample Input 3:**  11 8 1 | **Sample Output 3:**  11934 |

**Explanation for Sample Input 1:**

In the first case, the two ways the vote could have went is ABA and AAB, where A is a vote for André and B is a vote for Bertrand. BAA is not a valid since after the first vote, Bertrand has more votes than André.