How many different ways you can distribute N (distinguishable) gifts to K children where each child should receive at least M gifts? Two distributions are considered different if there is at least one gift which is given to different children in the distributions.

Input

A number of inputs (≤ 100) with three space separated integers N, K and M ($1 \leq M, K \leq N \leq 100000$), one on each line.

Output

Output one line per input, the answer *modulo* 1000000007.

Sample Input

```
4 2 2
100000 7 2000
```

Sample Output

```
6
516629367
```