1095 – Arrange the Numbers

Consider this sequence **{1, 2, 3 ... N}**, as an initial sequence of first **N** natural numbers. You can rearrange this sequence in many ways. There will be a total of **N!** arrangements. You have to calculate the number of arrangement of first **N** natural numbers, where in first **M** positions; exactly **K** numbers are in their initial position.

For Example, **N = 5, M = 3, K = 2**

You should count this arrangement **{1, 4, 3, 2, 5}**, here in first 3 positions 1 is in **1st** position and 3 in **3rd** position. So exactly 2 of its first 3 are in there initial position.

But you should not count **{1, 2, 3, 4, 5}**.

Input

Input starts with an integer **T (≤ 1000)**, denoting the number of test cases.

Each case contains three integers **N (1 ≤ N ≤ 1000), M (M ≤ N), K (0 < K ≤ M)**.

Output

For each case, print the case number and the total number of possible arrangements modulo **1000000007**.

Sample Input	Output for Sample Input
2 5 3 2 10 6 3	Case 1: 12 Case 2: 64320