

# A

# Arrange the Numbers

Consider this sequence  $\{1, 2, 3, \dots, N\}$ , as a initial sequence of first  $N$  natural numbers. You can rearrange this sequence in many ways. There will be  $N!$  different arrangements. You have to calculate the number of arrangement of first  $N$  natural numbers, where in first  $M$  ( $M \leq N$ ) positions, exactly  $K$  ( $K \leq M$ ) numbers are in its initial position.

Example:

For,  $N = 5, M = 3, K = 2$

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

But you should not count this  $\{1, 2, 3, 4, 5\}$ .

## Input

The first line of input is an integer  $T$  ( $T \leq 1000$ ) that indicates the number of test cases. Next  $T$  line contains 3 integers each,  $N$  ( $1 \leq N \leq 1000$ ),  $M$ , and  $K$ .

## Output

For each case, output the case number, followed by the answer modulo **1000000007**. Look at the sample for clarification.

### Sample Input

```
1
5 3 2
```

### Output for Sample Input

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Case 1: 12
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