How many different ways you can distribute N (**distinguishable**) marbles into K boxes where each box should contain at least X marbles? Two distributions are considered different if there is at least one marble which is contained by different boxes in the distributions.

Input

First line of the input contains T ($1 \leq T \leq 50$) which is the number of test cases. Each of the following T lines contains three space separated integers N, K and X ($1 \leq X \leq N \leq 100000$ and $1 \leq K \leq 50$).

Output

Output the case number, followed by the required quantity. Output the result *modulo* 1000000007.

Note: For the 1st case the possible distributions are (the i-th element is the box number for the i-th marble) : {1,1,2,2}, {1,2,1,2}, {1,2,2,1}, {2,2,1,1}, {2,1,2,1}, {2,1,1,2}.

Sample Input

```
3
4 2 2
10 5 3
900 5 20
```

Sample Output

```
Case 1: 6
Case 2: 0
Case 3: 76094425
```