Problem A. The parallel universes

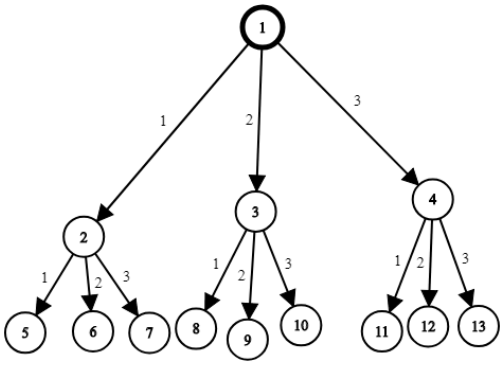
Input file:	`standard input`
Output file:	`standard output`
Time limit:	1 second
Memory limit:	256 megabytes

HAMMOU is a smart guy, he was thinking about what if parallel universes exist.

He believe that all theses universes, if they exist, might be connected like a k-tree where nodes are the universes and the edges are gates between universes. Each gate has a cost equal to and the root is the current universe.

A k-tree is :
- each vertex has exactly k children;
- each edge has some weight;
- if we look at the edges that goes from some vertex to its children (exactly k edges), then their weights will equal 1, 2, 3, ..., k.f we look at the edges that goes from some vertex to its children (exactly k edges), then their weights will equal 1, 2, 3, ..., k.

The picture below shows a part of a 3-tree.



HAMMOU wondered : "How many paths of total weight n (the sum of all weights of the edges in the path) are there, starting from the current universe and also containing at least one gate cost d ?".

Help HAMMOU to answer his question (Yeah, he is smart but sometimes everyone needs help). As the As the number of ways can be rather large, print it modulo $1000000007(10^9 + 7)$.

Input

The input consists of multiple test cases, the first line of the input file contains one integer T denoting the number of test cases ($0 < \mathrm{T} \leq 10$).
Each test case is denoted by three space-separated integers: n, k and d ($1 \leq n, k \leq 100; 1 \leq d \leq k$).

Output

For each test case output print a single integer — the answer to the problem modulo $1000000007(10^9 + 7)$.