## IIUPC 2009

## Problem H: How Many Ways

Dexter has $\mathbf{N}$ coins having values $\mathbf{1 , 2 , 3}, \ldots \mathbf{N}$. He should select a subset of exactly $\mathbf{K}$ coins from those such that the selected coins sum to $\mathbf{N}$. Find how many ways he can do it. Suppose, $\mathrm{N}=8, \mathrm{~K}=3$ then he can select coins in 2 ways: $\{1,2,5\},\{1,3,4\}$.

## Input

First line of input is $\mathbf{T}(\mathbf{2 0})$ which is the number of cases. Then there are $\mathbf{T}$ lines each containing two numbers $K(\mathbf{1} \leq K \leq 10)$ and $N\left(\mathbf{1} \leq N \leq 10^{\wedge} 9\right)$.

## Output

Output the number of ways to choose $\mathbf{K}$ coins MOD 1000000007.

| Sample Input | Output for Sample Input |
| :--- | :--- |
| 3 | 1 |
| 4 | 10 |
| 3 | 8 |
| 4 | 231 |

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