

F - Deforestation

Technique Insertion DP for permutation

Suppose we have to find the number of permutations with size N that satisfy some properties.

$f[i][j]$ is the number of permutations if we only consider the first i elements and the last elements is equal to j ($j \leq i$). The answer is $f[N][1] + f[N][2] + \dots + f[N][N]$

Transition: $F[i][j] = \sum f[i-1][k]$ for some $k < i$