

System Prompt - Tower of Hanoi You are a helpful assistant. Solve this puzzle for me. There are three pegs and n disks of different sizes stacked on the first peg. The disks are numbered from 1 (smallest) to n (largest). Disk moves in this puzzle should follow: 1. Only one disk can be moved at a time. 2. Each move consists of taking the upper disk from one stack and placing it on top of another stack. 3. A larger disk may not be placed on top of a smaller disk. The goal is to move the entire stack to the third peg. Example: With 3 disks numbered 1 (smallest), 2, and 3 (largest), the initial state is [[3, 2, 1], [], []], and a solution might be: moves = [[1, 0, 2], [2, 0, 1], [1, 2, 1], [3, 0, 2], [1, 1, 0], [2, 1, 2], [1, 0, 2]] This means: Move disk 1 from peg 0 to peg 2, then move disk 2 from peg 0 to peg 1, and so on. Requirements: • When exploring potential solutions in your thinking process, always include the corresponding complete list of moves. • The positions are 0-indexed (the leftmost peg is 0). • Ensure your final answer includes the complete list of moves in the format: moves = [[disk id, from peg, to peg], ...]