

RECURSION

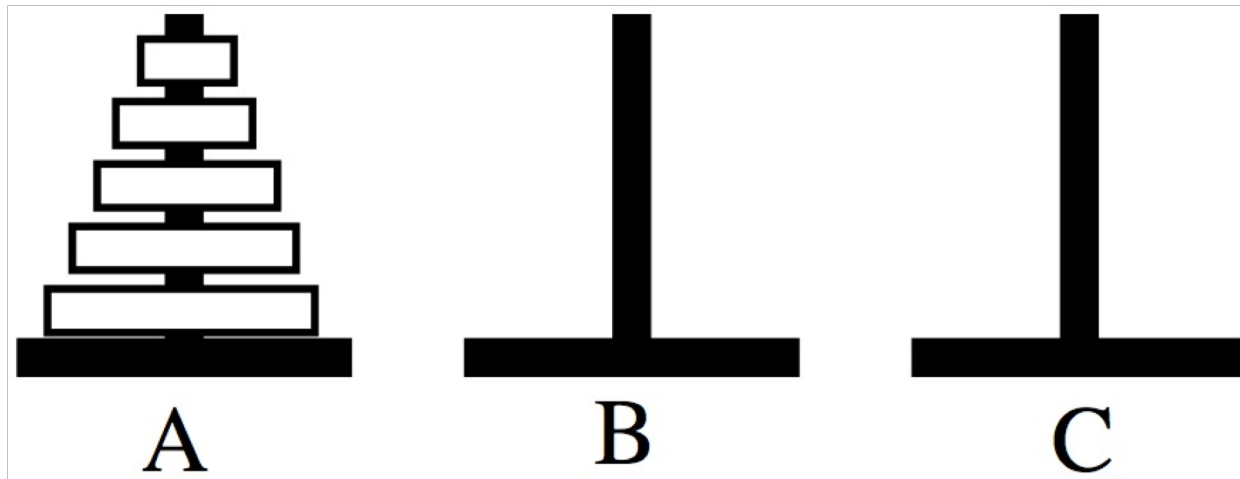
CSC111: Introduction to CS through Programming

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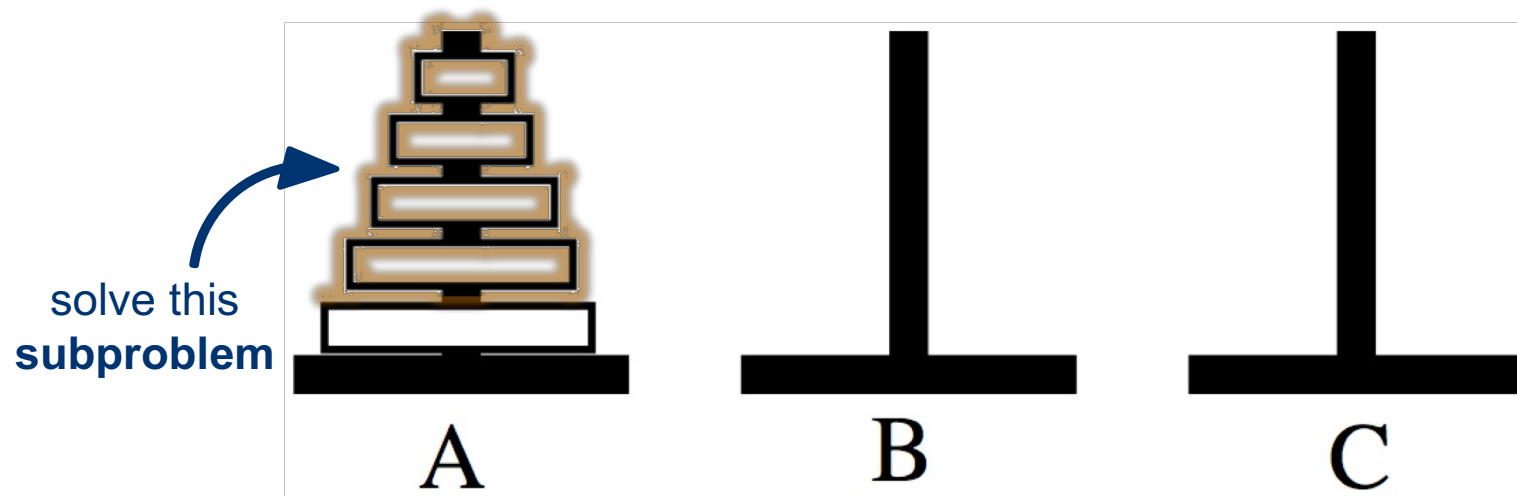
Towers of Hanoi



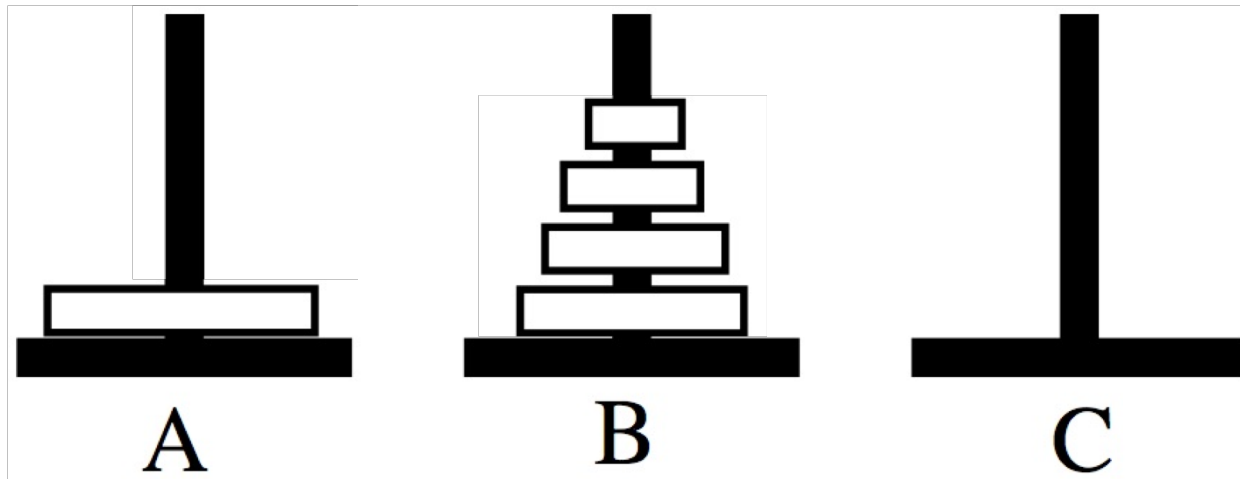
Rules of the game

- You can only move **one** disk at a time
- You can only move a disk to a pole where it will be the **smallest** (i.e. you can't put a disk on top of a larger one)
- You can only remove the **smallest** disk from a pole (i.e. you can't lift up the stack to get a larger disk from below)

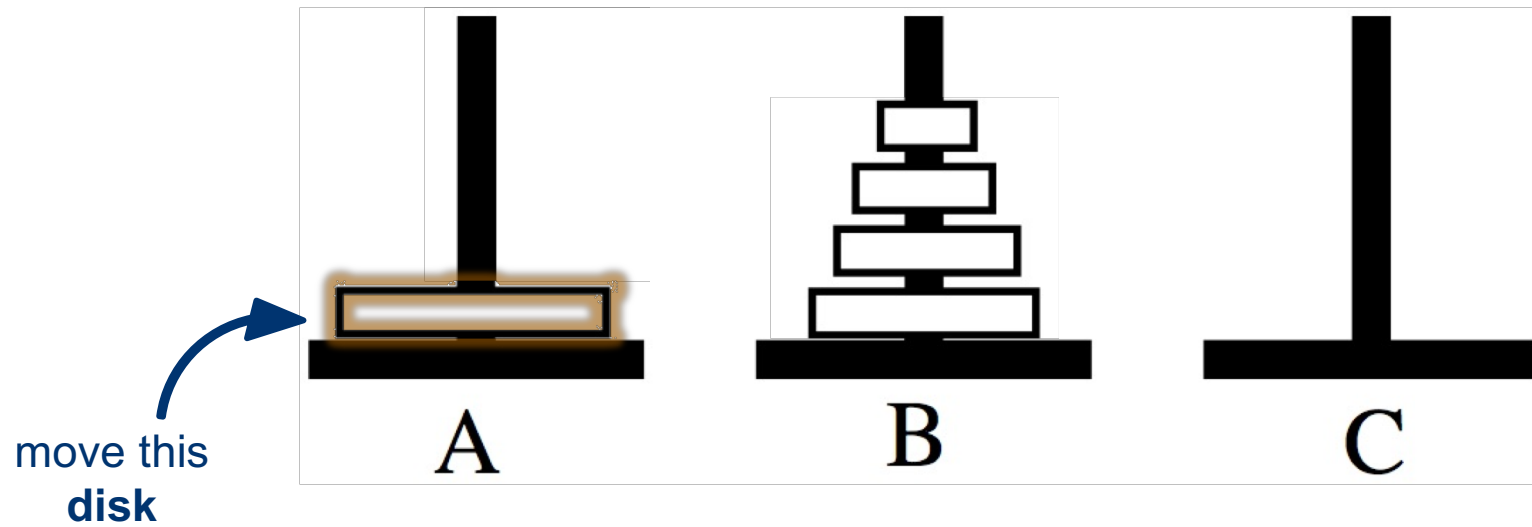
Recursive Towers



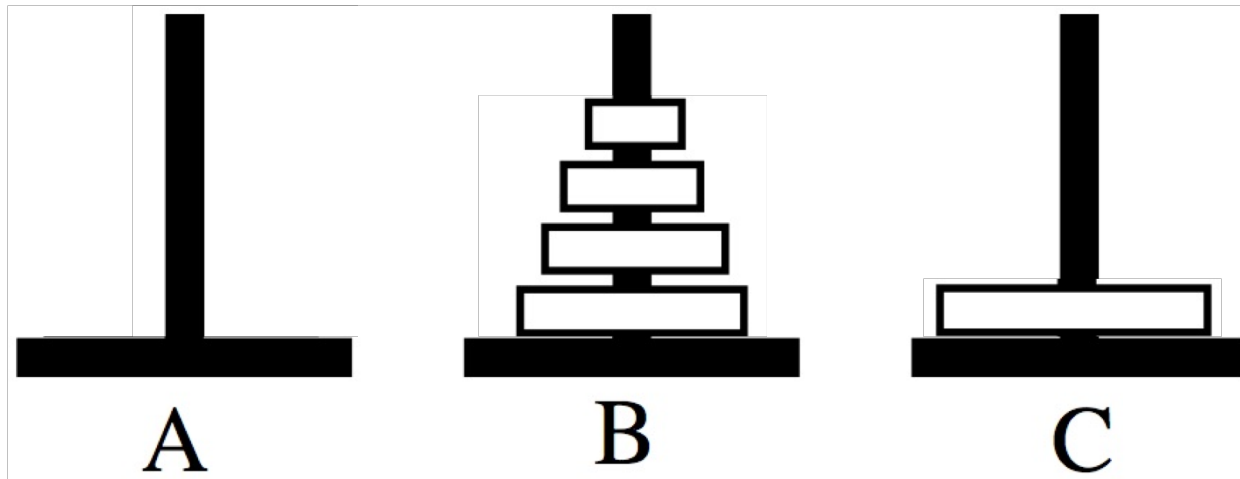
Recursive Towers



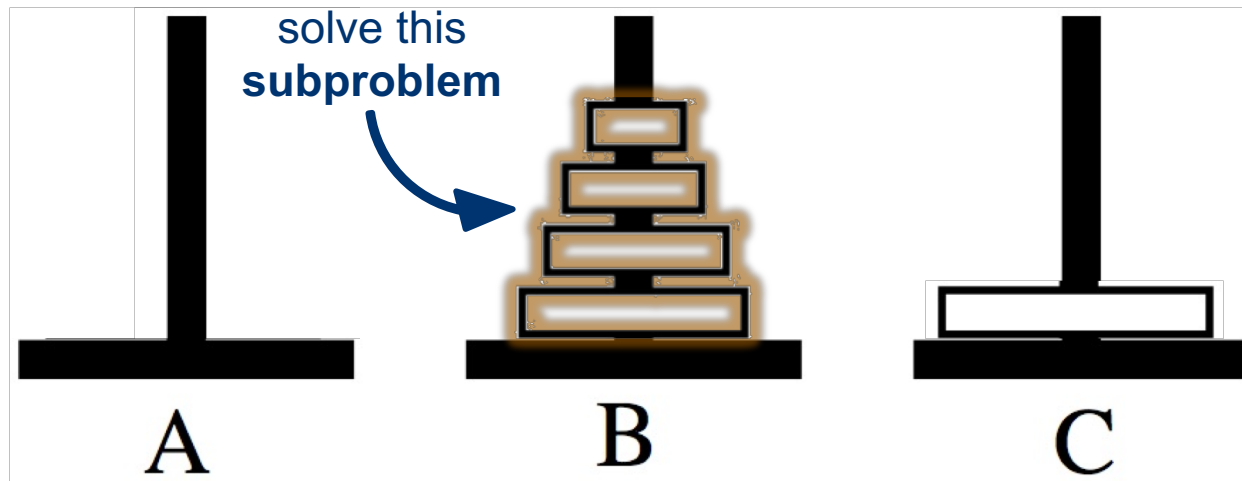
Recursive Towers



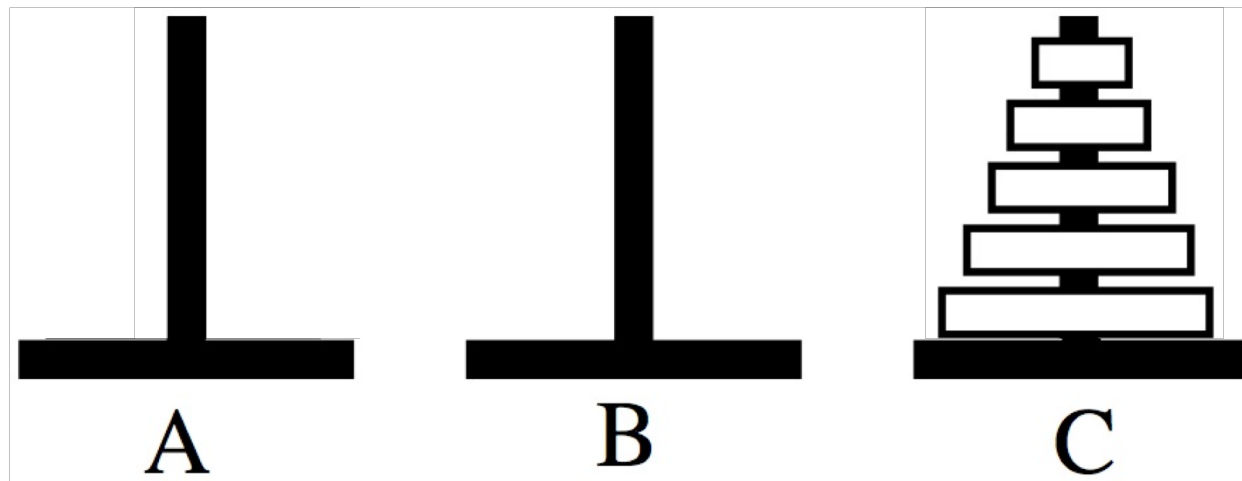
Recursive Towers



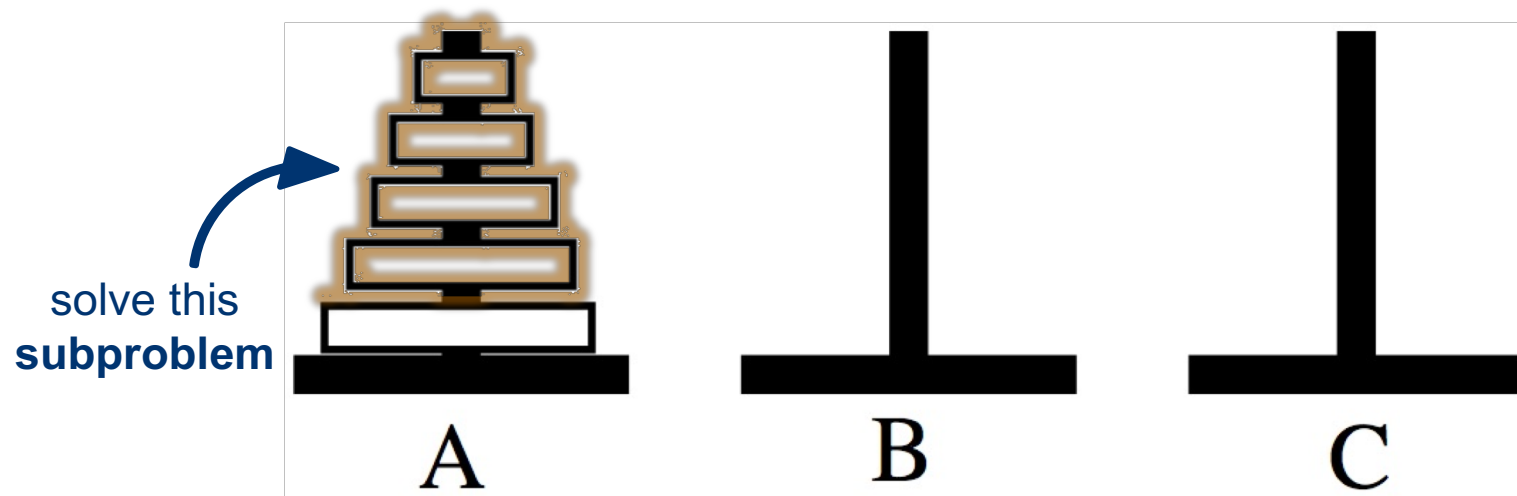
Recursive Towers



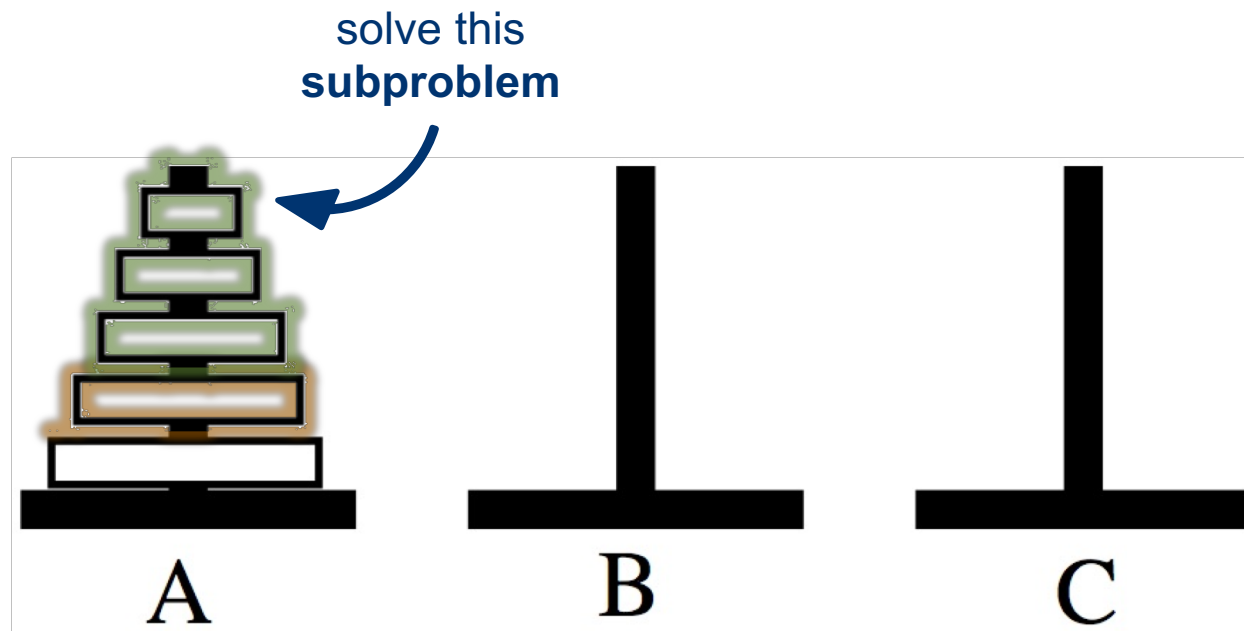
Recursive Towers



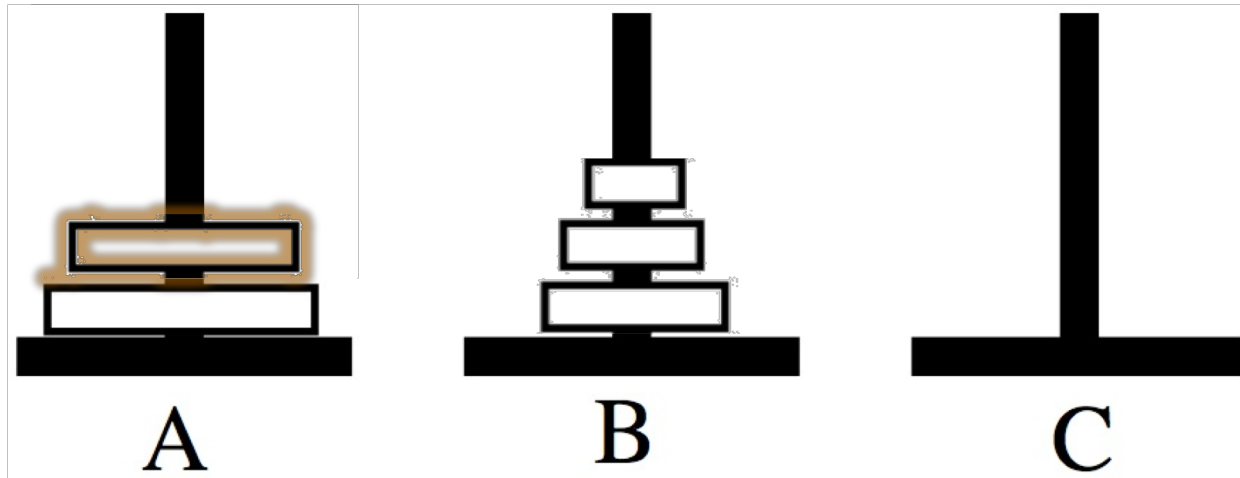
Recursive Towers



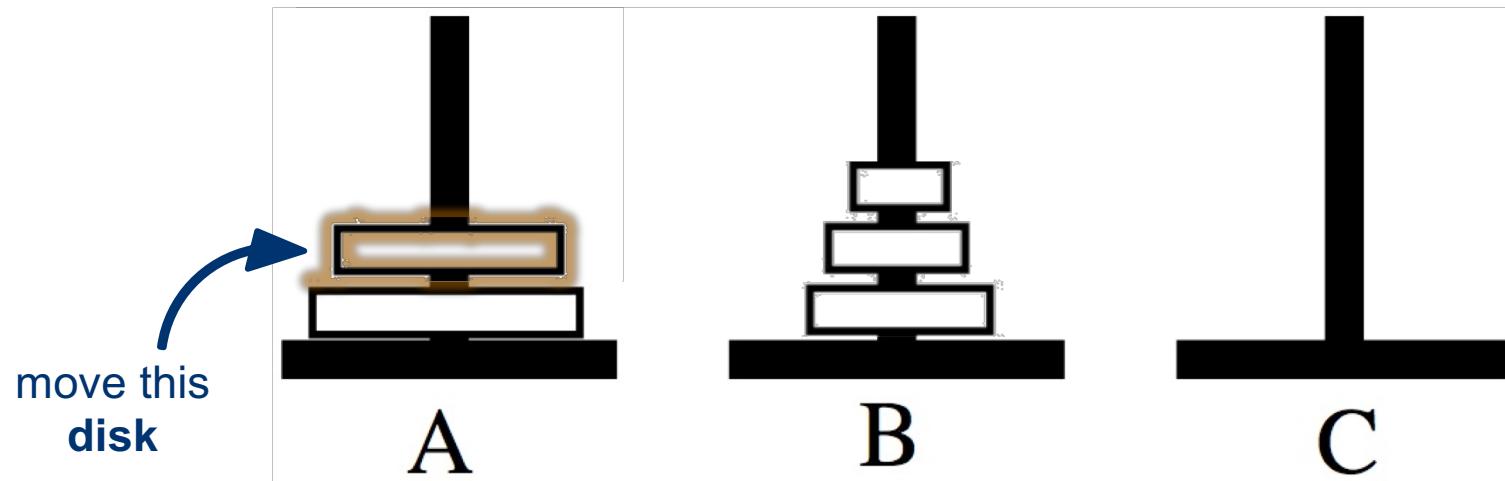
Recursive Towers



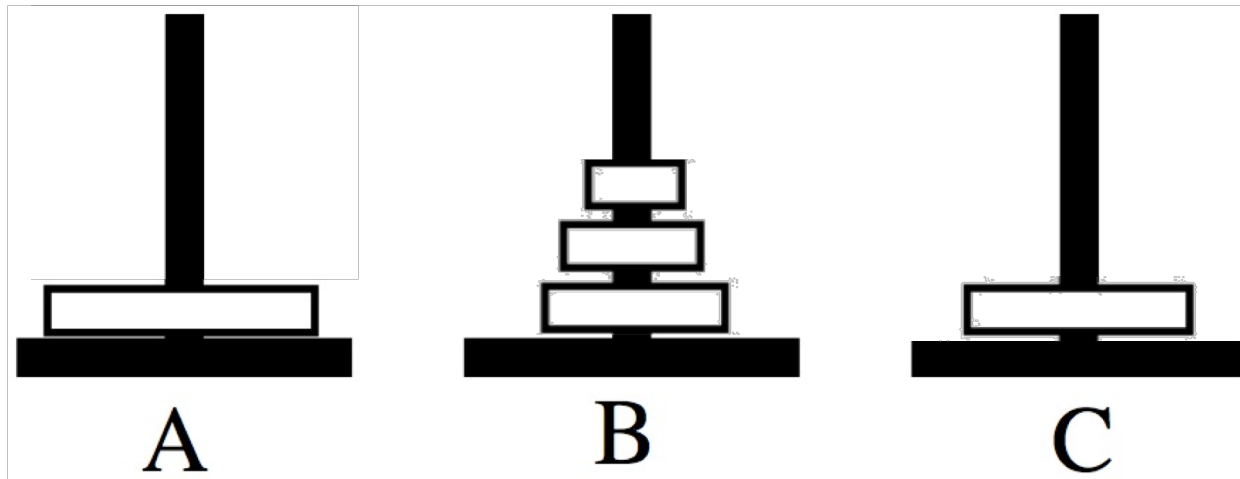
Recursive Towers



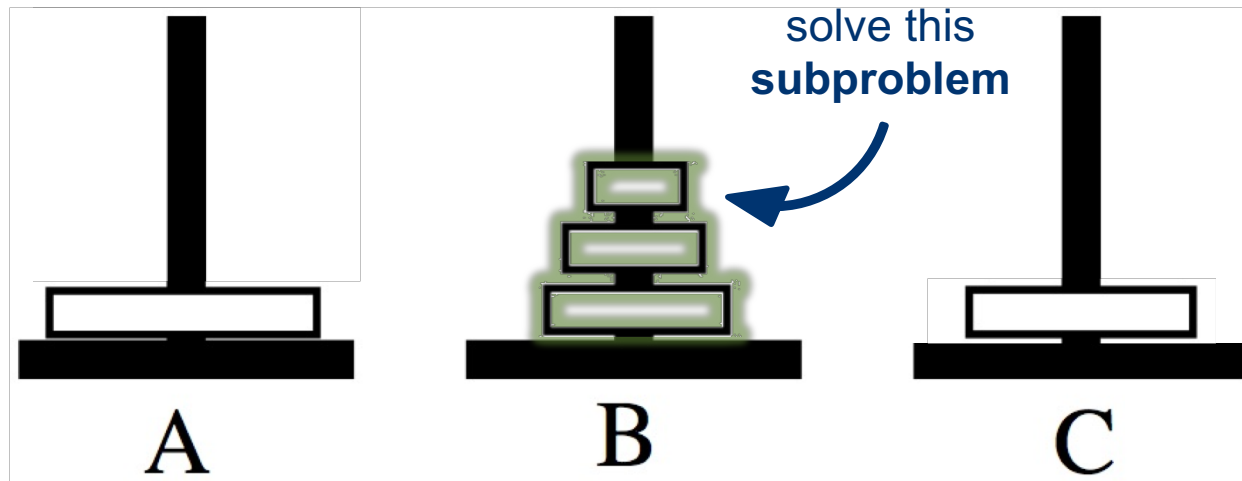
Recursive Towers



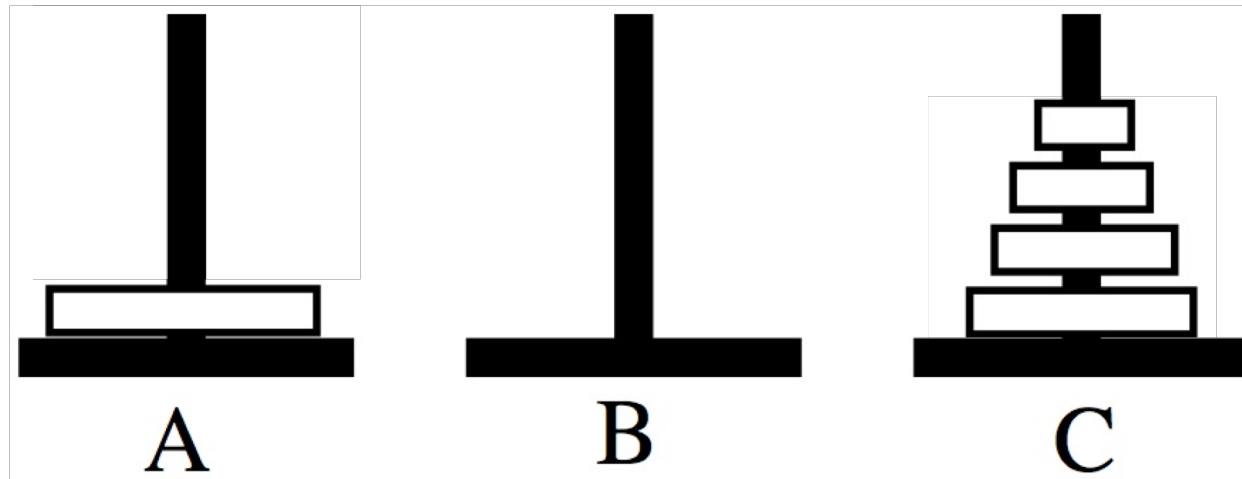
Recursive Towers



Recursive Towers



Recursive Towers



...and so on!