
Coding Blocks

SNU Workshop

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Topics

- **Introduction**

- Programming Basics

- **What is Recursion?**

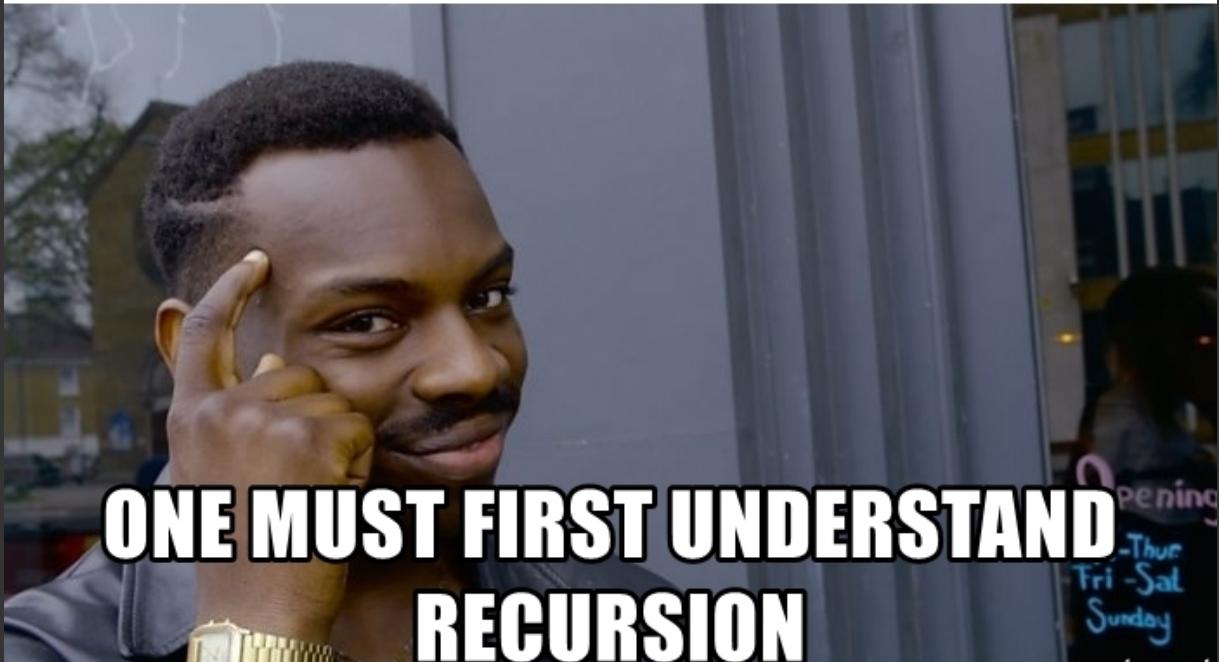
- How recursion is useful in problem solving.

- **Backtracking**

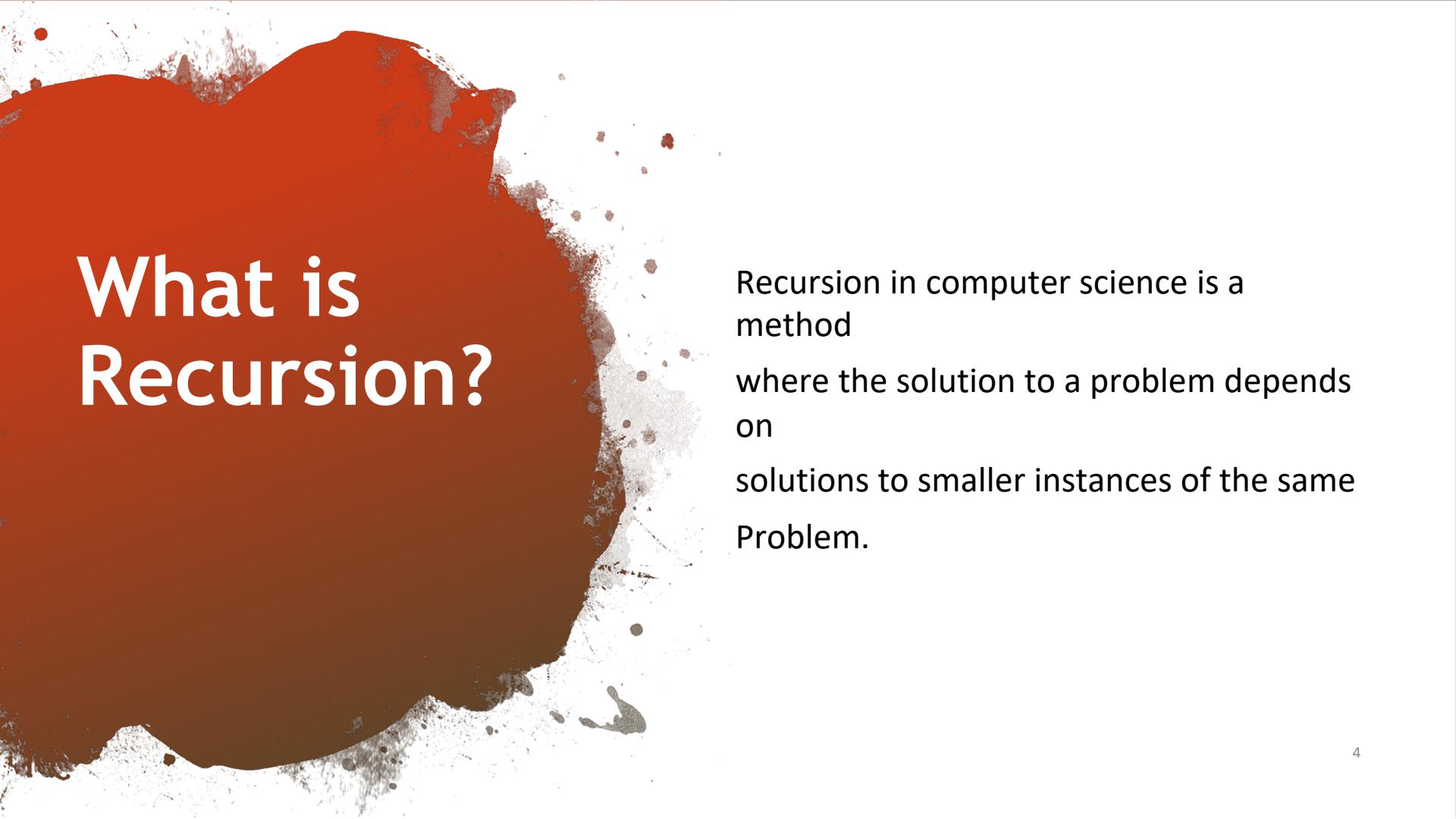
- What is exactly Backtracking

What is
Recursion?

TO UNDERSTAND RECURSION



What is Recursion?



Recursion in computer science is a method where the solution to a problem depends on solutions to smaller instances of the same Problem.

Parts of Recursive Algorithm

- Base Case (i.e., when to stop)
- Work toward Base Case
- Recursive Call (i.e., call ourselves)

The "work toward base case" is where we make the problem simpler. The recursive call, is where we use the same algorithm to solve a simpler version of the problem. The base case is the solution to the "simplest" possible problem

Print Factorial of N?

What is the recursive call?
What is the base case?

Print Nth Fibonacci Number

What is the recursive call?

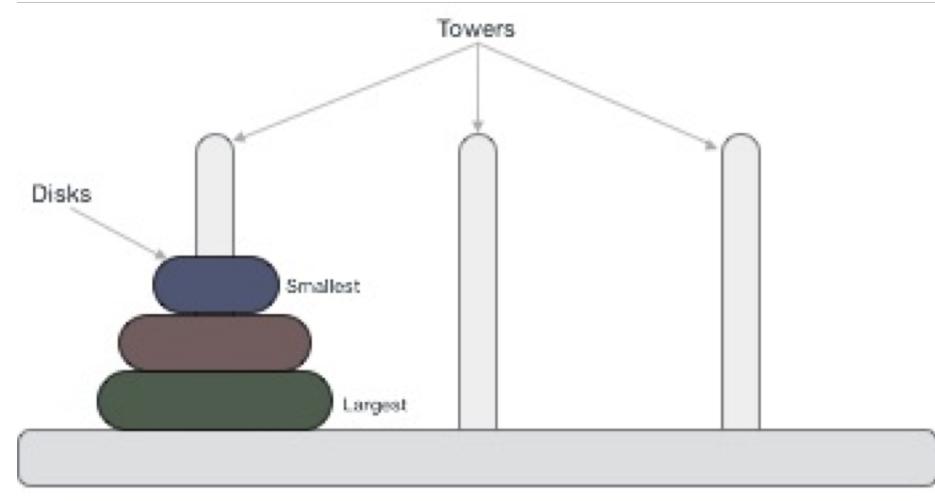
Base Case?

Behind the
scenes!

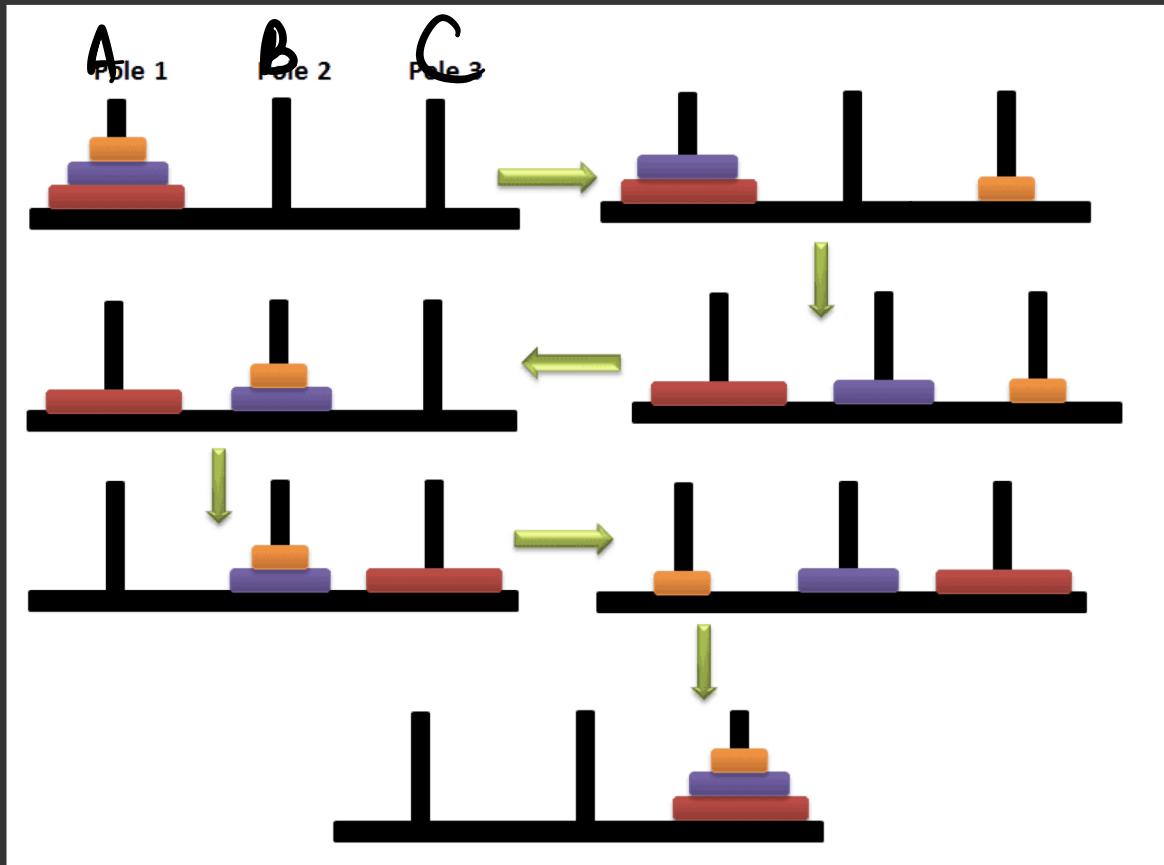
Check if an array is sorted?

What is the recursive call?
Base Case?

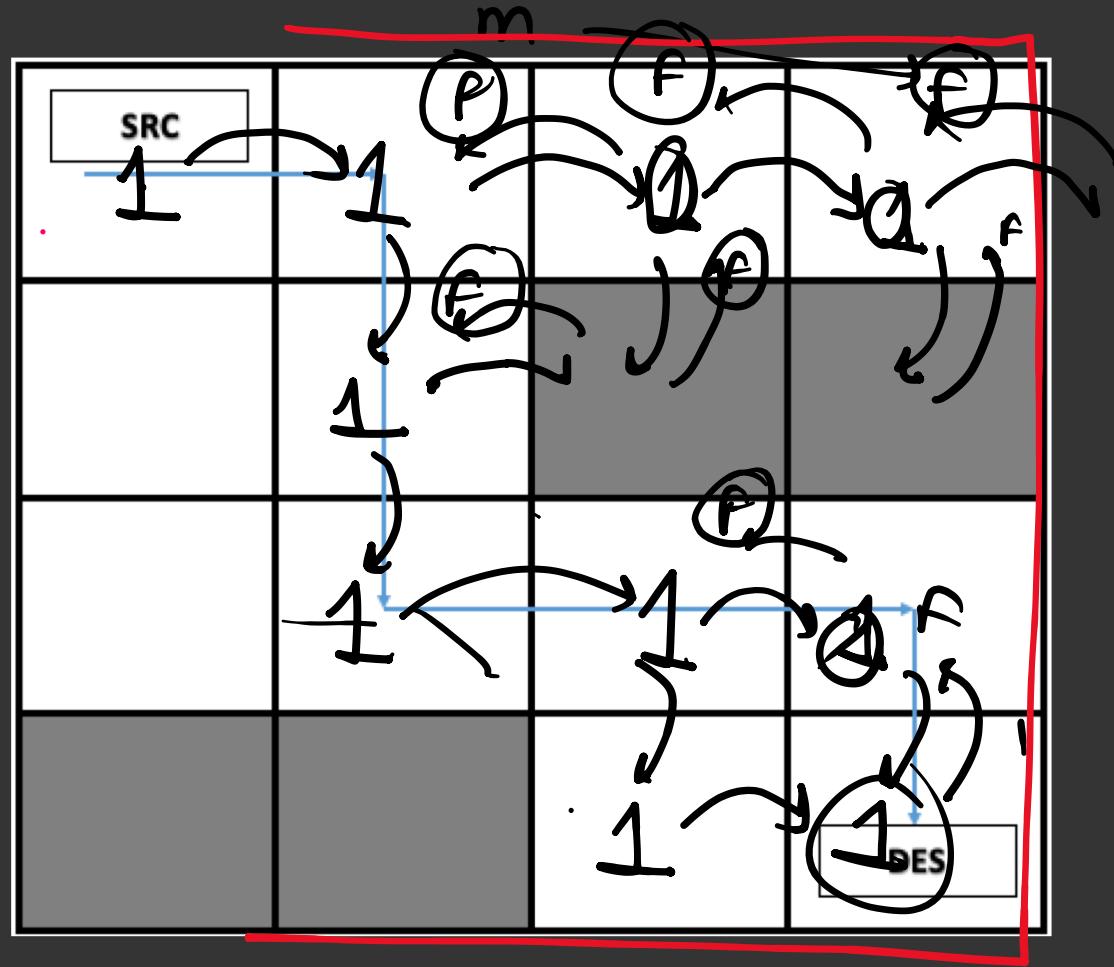
Tower Of Hanoi?



Tower Of Hanoi?



Rat In Maze?



About Your Hosts!



Workshops/Bootcamp

- DS Algo in C++/Java
- Competitive Programming
- Machine Learning
- Interview Prep
- Web-Dev
- Game Development
- Python Project

Free Resources

- Youtube Channel - FREE Resources
(cb.lk/yt) → **Subscribe**
For todays class notes :
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- CB IDE (FREE)
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(hackerblocks.com)
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Thanks for Joining!

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Thanks for being a Good Audience!

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