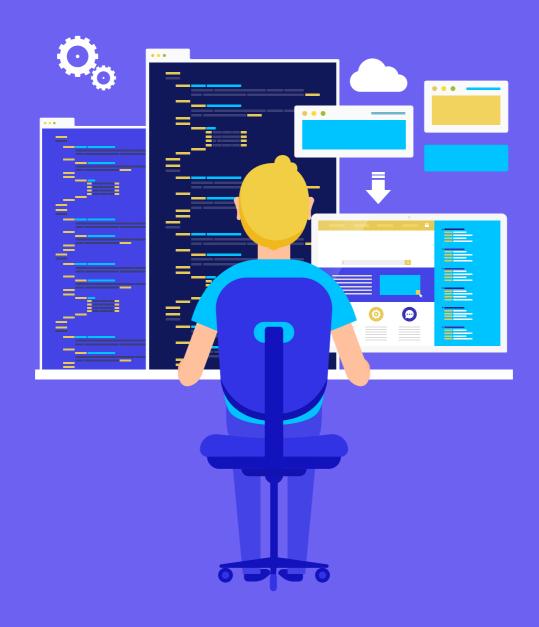
# Advanced Problem Solving: Recursion







# Things I should know before attending today's class.

We have already learned about the general concepts of recursion, call stack, and base cases. Before this session, we have seen basic problems with recursion in JavaScript. In this session, we will learn some advanced problems on recursion.

#### What is Recursion?

Recursion allows the function to be repeated several times because it calls itself during its execution. Here the function calls itself until the specified condition is met.

Every recursion function must have at least two cases:

- 1. recursive cases
- 2. base cases

We will see different functionalities of the recursion in this session

- 1. Base cases
- 2. Call stack
- 3. Backtracking technique

## What will we be doing in this session?

We will be solving data structures and algorithms problems based on recursion and will deep dive into various approaches and discuss the time and space complexity for each of the problems.

- · Rat In a Maze
- N Queen
- Sudoku Solver
- · Knights tour
- · Squareful array

## **Upcoming Class Teaser**

- · Order of Growth
- · Asymptotic Analysis
- Various types of Complexity Notations
- · Big O notation
- · Time Complexity
- · Space Complexity
- · Calculating Time and Space Complexity