DSA through C++

Introduction to Recursion

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Agenda

- What is Recursion
- Types of Recursion

What is Recursion

- Function calling itself is called recursion
- A recursive method solves a problem by calling a copy of itself to work on a smaller problem
- It is important to ensure that the recursion terminates
- Recursive code is generally shorter and easier to write then iterative code

Types of Recursion

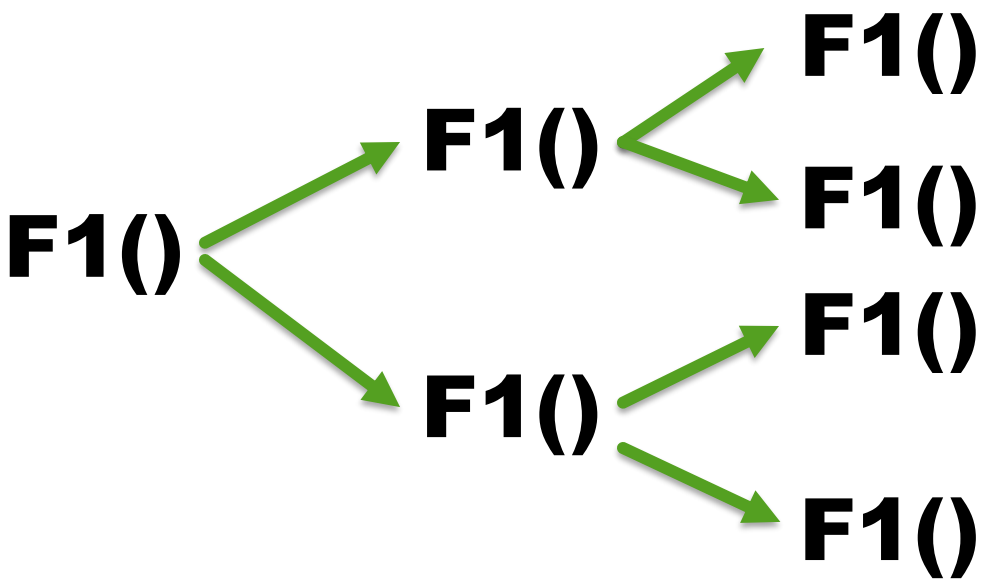
- Liner Recursion
- Binary Recursion
- Ternary Recursion
- Tail Recursion
- Exponential Recursion

Liner Recursion

F1() → F1() → F1() → F1()

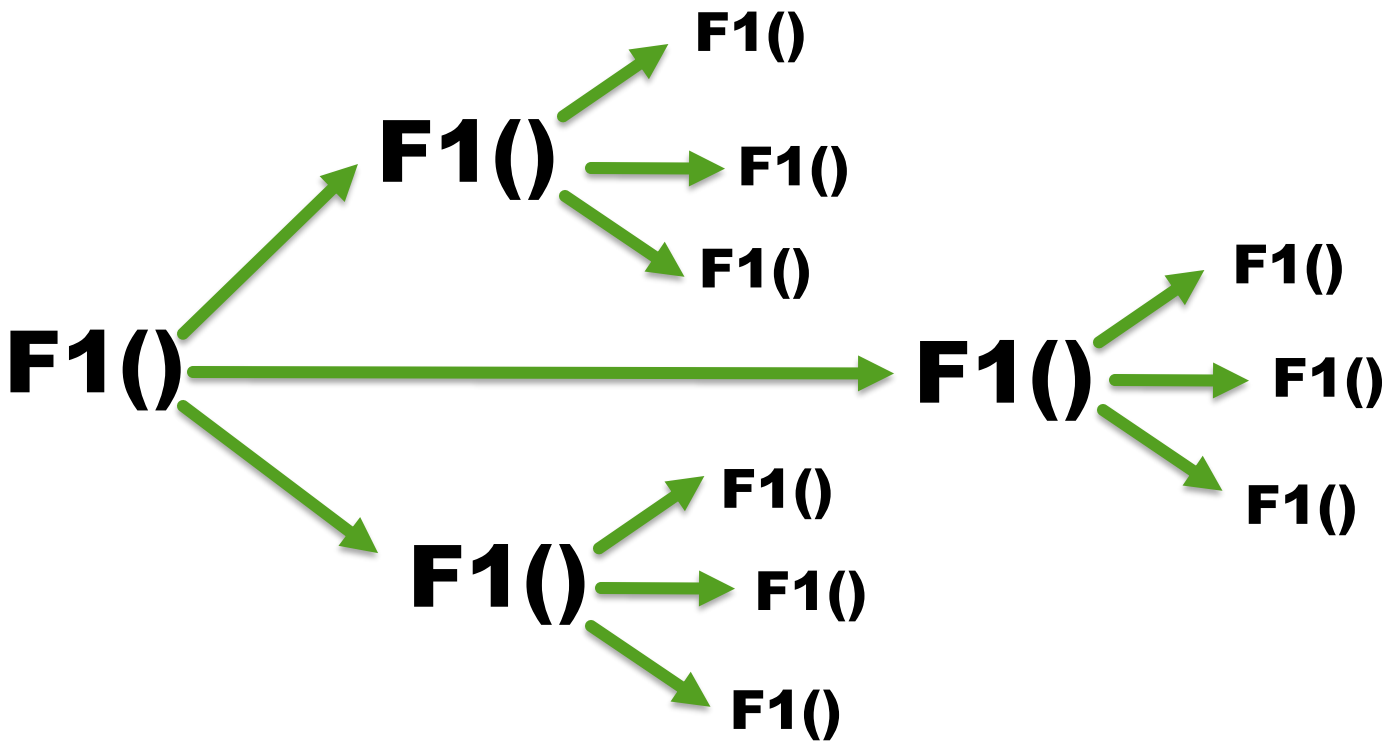
- **Liner Recursion मैं हर function ek बार खुद को call करेगा**

Binary Recursion



- **Binary Recursion** मैं हर **function do** बार खुद को **call** करेगा

Ternary Recursion



- **Ternary Recursion** मैं हर **function** तीन बार खुद को **call** करेगा

Tail Recursion

- **Tail Recursion मैं हर function ek बार खुद को call करेगा**

Exponential Recursion