

1. DFS Basic Simulation : Depth First Search

STEP : { Pause and Active Method }

- a. Select a Node
- b. Explore a Node

2. Difference with BFS :

BFS \rightarrow Level wise

DFS \rightarrow Depth wise

With Recursion we can do DFS Traversal

3. Recap: Recursion - 1 :

STEP :

- a. Solving the smallest problem [Base Case]
- b. Solving the larger problem using the smallest problem's solution.
- c. Generalize the relation into a formula

Sum (n) using Recursion :

Smallest problem : $\text{Sum}(1) \rightarrow 1$

Larger problem : $\text{Sum}(2) \rightarrow \text{sum}(1) + 2 \rightarrow 2$

Generalize formula : $\text{Sum}(n) = \text{sum}(n-1) + n$

4. Recap: Recursion - 2 :

Solving Palindrome string by Recursion