**DEEP-FIRST SEARCH**

It is a technique where we go deep as possible along the branch before backtracking

There are three types of deep first search

1. Inorder
2. Preorder
3. Postorder
4. **Inorder**

In Inorder, we first go to the left subtree, then the root, and finally the right subtree. This order is mostly used in Binary Search Trees because it gives sorted values.

**steps:**

* Visit the left subtree.
* Visit the root node.
* Visit the right subtree.

**Example**

Inorder result -> d, b, e, a, c, f, g

1. **Preorder**

In Preorder, we first visit the root, then go to the left child, and after that the right child.

**Steps:**

* Visit the root node.
* Visit the left subtree.
* Visit the right subtree.

**Example:**

Preorder result -> a, b, d, e, c, f, g

1. **POSTORDER**

In Postorder, we first go to the left, then the right, and at the end the root.

**Steps:**

* Visit the left subtree.
* Visit the right subtree.
* Visit the root node.

**Example:**

Postorder result -> d, e, b, g, f, c, a