Lab 7 DSA Refresher Module

Duration: 04:00 pm to 05:10 pm.
After 5:10 pm, no submissions allowed.

Title: **Binary Tree Construction Challenge**

You are a software engineer tasked with developing a feature for a tree visualization tool. Your next assignment involves constructing a binary tree from given inorder and postorder traversal arrays. These arrays represent the traversal sequences of the same binary tree. Your goal is to write a function that constructs the binary tree and returns it in a specific format.

Problem Statement

Given two integer arrays `inorder` and `postorder`, where:

- `inorder` is the inorder traversal of a binary tree.

- `postorder` is the postorder traversal of the same binary tree.

Construct and return the binary tree in a list representation.

Example 1

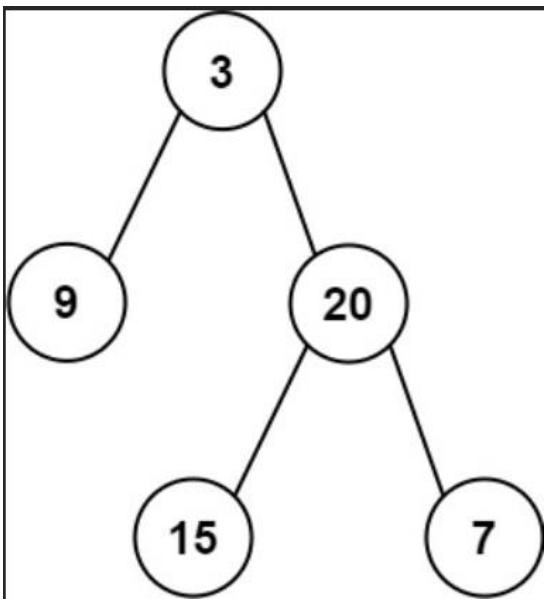
- **Input:**

  - inorder = [9,3,15,20,7]

  - postorder = [9,15,7,20,3]

- **Output:** [3, 9, 20, null, null, 15, 7]

Image Reference



Example 2

- **Input:**

  - inorder = [-1]

  - postorder = [-1]

- **Output:** [-1]

Requirements

1. Develop a function that takes `inorder` and `postorder` arrays as input and constructs the corresponding binary tree.

2. Return the binary tree in a list representation, where the list represents the tree in level-order traversal.

Can you construct the binary tree from the given inorder and postorder traversal arrays?