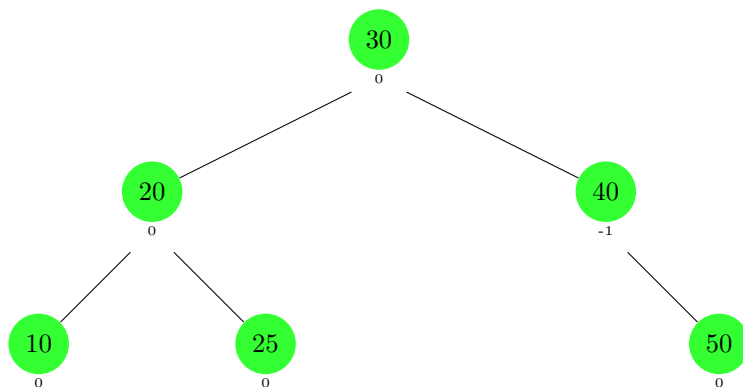


## Introduction

The AVL tree is a self-balancing binary search tree where the difference in heights between the left and right subtrees of any node (known as the balance factor) is at most 1. When an imbalance occurs due to insertion or deletion, rotations are performed to restore balance.

## Initial AVL Tree



## Step-by-Step Process

The following figures illustrate the AVL tree at various stages of the deletion and balancing process:

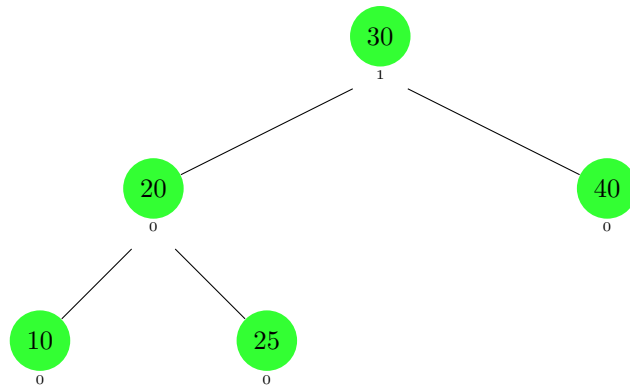


Figure 1: Step 1

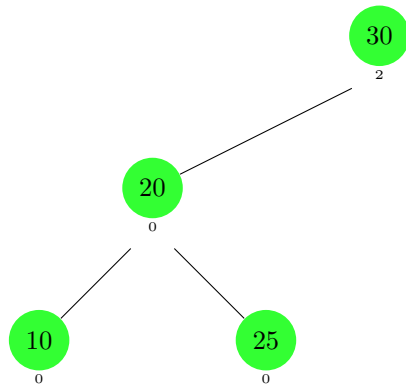


Figure 2: Step 2

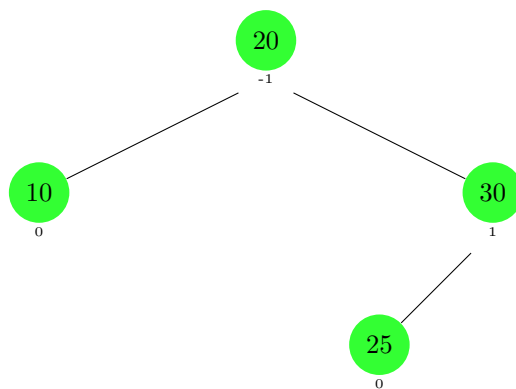


Figure 3: Step 3