Introduction

The Red-Black tree is a self-balancing binary search tree where each node is either red or black. The tree maintains balance through several properties that ensure it remains approximately balanced.

Step-by-Step Process

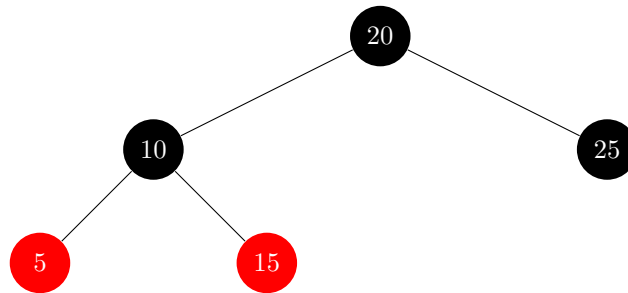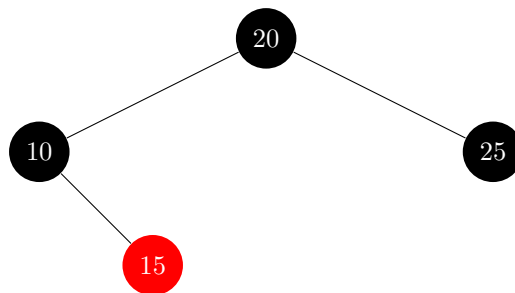The following figures illustrate the Red-Black tree at various stages of the deletion and balancing process:

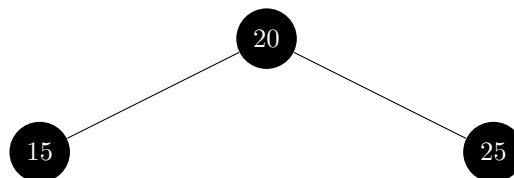Figure 1: Initial Tree

Figure 2: Step 2

Figure 3: Step 3