CSE220: Data Structures (Lab)
Fall 2024
Lab Quiz - 05
Duration: 30 Minutes

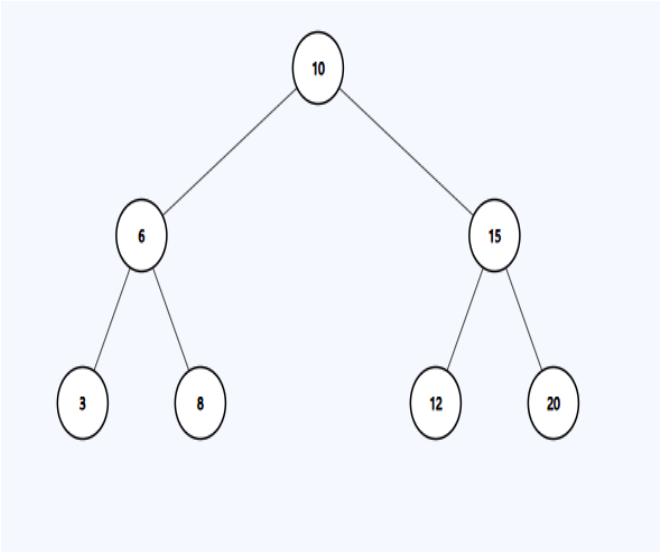
B

Name:	ID:	Section:

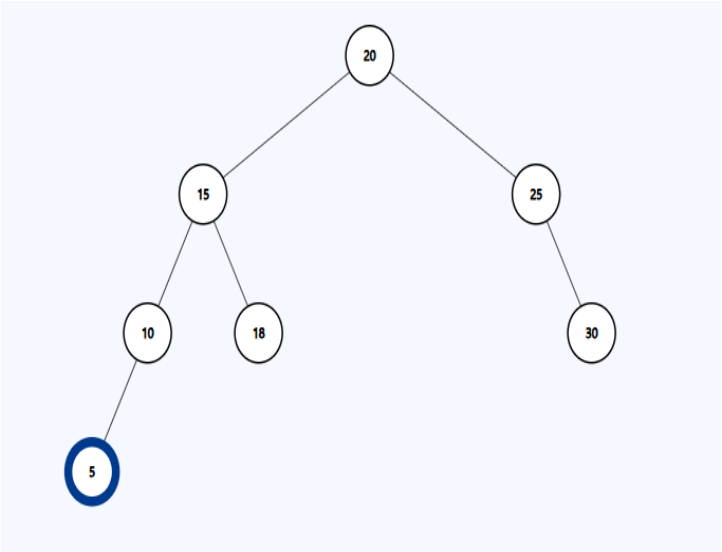
Question 1 [15 Points]

In this task you will be given the root node of a binary search tree. You need to calculate the **sum** of the values of the nodes that are **mirrors** of each other. Here, mirror means the nodes that are located in **corresponding positions in the left and right subtrees**. You need to define the **Node class** for Binary Tree. You can use **helper functions** .

Example Tree input 1



Example Tree input 2



Sample Input	Sample Output	Explanation
mirror(root)	64	For Tree 1 Mirror nodes are: 6 and 15, sum = 6 + 15 = 21 3 and 20, sum = 3 + 20 = 23 8 and 12, sum = 8 + 12 = 20 Total Mirror Node Sum = 21 23 20 = 64
mirror(root)	80	For Tree 2 Mirror nodes are: 15 and 25, sum = 15 + 25 = 40 10 and 30, sum = 10 +30 = 40 Total Mirror Node Sum = 40 + 40 = 80