Online - 3.1

Binary Search Tree

Duration: 30 mins   Prepared by: Syed Muhammad

A few definitions before we start.

- **Depth of a node** refers to the number of its ancestors, excluding the node itself
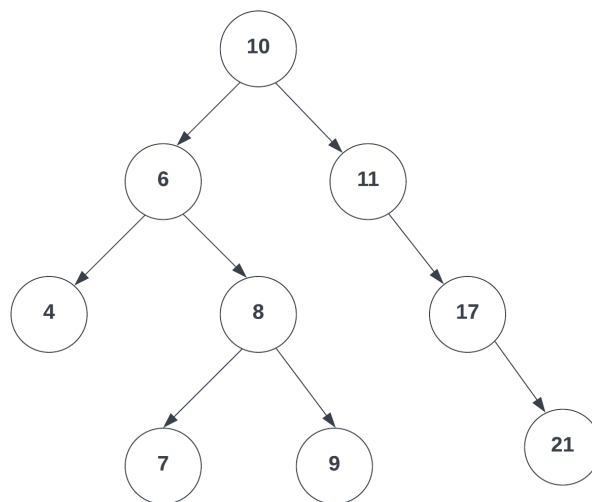- **Height of a tree** refers to the maximum depth of any node in the tree

Figure : 1

For the tree in **Figure 1** the **depth of node 8 is 2** and the **Height of the tree is 3**

For this online you will extend your offline by adding two more operations:

- **Depth** (P) followed by an integer denoting the value of the node for which the depth is to be calculated
  Returns: the depth of the node

- **Height** (H) followed by any random integer for consistency but will be ignored for this operation. You can skip taking the integer as input if convenient.
  Returns: the height of the BST at its current stage