

# **BST Questions**

#### Question 1:

# Range Sum of BST

We have a Binary Search Tree consisting of N nodes and two positive integers L and R, the task is to find the sum of values of all the nodes that lie in the range [L, R].

#### Sample Input1::

Sample Output1:11

## Question 2:

# Find the closest element in Binary Search Tree

We have a binary search tree and a target node K. The task is to find the node with minimum absolute difference with given target value K.

Sample Input 1:5

**Sample Output 1**:5 (difference is 0)

Sample Input 2:.19

**Sample Output 2**: 20 (difference is 1)

#### Ouestion 3:

#### Find k-th smallest element in BST

We have the root of a binary search tree and K as input, find Kth smallest element in BST.



# 8 /\ 5 11 /\ \ 3 6 20

Sample Input 1 : k=3
Sample Output 1 : 8

Sample Input 2 : k=5Sample Output 2 : 5

# Question 4:

#### **Two Sum BSTs**

Given a BST, transform it into a greater sum tree where each node contains sum of all nodes greater than that node.

## Sample Input 1:

x = 16

## Sample Output 1:3

The pairs are:

(5, 11), (6, 10) and (8, 8)

## Question 5:

#### **Maximum Sum BST in Binary Tree**

We have a binary tree, the task is to print the maximum sum of nodes of a sub-tree which is also a Binary Search Tree.



# Sample Input 1:

Sample Output 1:8