# 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)

## Question 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.

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

**Sample Input 2** : k=5
**Sample 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

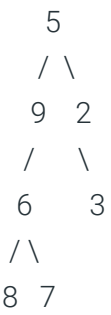
**Sample Output 1** : 3
The pairs are:
(5, 11), (6, 10) and (8, 8)

## 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