Given a binary search tree, write a function kthSmallest to find the **k**th smallest element in it.

**Note:**   
You may assume k is always valid, 1 ≤ k ≤ BST's total elements.

**Example 1:**

**Input:** root = [3,1,4,null,2], k = 1

3

/ \

1 4

\

  2

**Output:** 1

**Example 2:**

**Input:** root = [5,3,6,2,4,null,null,1], k = 3

5

/ \

3 6

/ \

2 4

/

1

**Output:** 3

Runtime: 0 ms, faster than 100.00% of Java online submissions for Kth Smallest Element in a BST.

Memory Usage: 39 MB, less than 15.86% of Java online submissions for Kth Smallest Element in a BST.