

272. Closest Binary Search Tree Value II

Hard 570 20 Add to List Share

Given a non-empty binary search tree and a target value, find k values in the BST that are closest to the target.

Note:

- Given target value is a floating point.
- You may assume k is always valid, that is: $k \leq$ total nodes.
- You are guaranteed to have only one unique set of k values in the BST that are closest to the target.

Example:

Input: root = [4,2,5,1,3], target = 3.714286, and $k = 2$

```
    4
   / \
  2   5
 / \
1   3
```

Output: [4,3]

Follow up:

Assume that the BST is balanced, could you solve it in less than $O(n)$ runtime (where n = total nodes)?

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Contributor



Companies *i*



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i {} > < << >>

```
1 # Definition for a binary tree
  node.
2 # class TreeNode(object):
3 #     def __init__(self, val=0,
  left=None, right=None):
4 #         self.val = val
5 #         self.left = left
6 #         self.right = right
7 class Solution(object):
8     def closestKValues(self, root,
  target, k):
9         """
10         :type root: TreeNode
11         :type target: float
12         :type k: int
13         :rtype: List[int]
14         """
15
```

Console

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