

# Check if a given array can represent Preorder Traversal of Binary Search Tree

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Given an array of numbers, return true if given array can represent preorder traversal of a Binary Search Tree, else return false. Expected time complexity is  $O(n)$ .

```
import sys
class Solution:
    # @param A : list of integers
    # @return an integer
    def solve(self, A):
        self.idx = 0
        minVal = -sys.maxsize
        maxVal = sys.maxsize
        self.helper(A,minVal,maxVal)
        if self.idx==len(A):
            return 1
        return 0

    def helper(self,arr,minVal,maxVal):
        if self.idx>=len(arr):
            return
        if minVal<=arr[self.idx] and arr[self.idx]<=maxVal:

            val = arr[self.idx]
            self.idx+=1
            self.helper(arr,minVal,val)
            self.helper(arr,val,maxVal)
```