Search in a BST   Z11868_en

A **binary search tree** (BST) is a binary tree such that for each node **n** in the tree the elements in the left subtree of the tree rooted at **n** are less than the element at node **n**, and the elements of the right subtree of the tree rooted at **n** are greater than the element at the node **n**.

Write a program that first reads a binary tree of integer numbers in pre-order. The input binary tree will be always a BST. Then, the program reads a sequence of integer numbers, and for each number in the sequence determines whether the number is or not in the input BST.

Sample input

```
180 155 60 -1 80 -1 -1 170 -1 -1 300
240 -1 -1 400 310 -1 340 -1 -1 -1

60
180
400
310
160
0
500
```

Sample output

```
60 1
180 1
400 1
310 1
160 0
0 0
500 0
```

Problem information

Author :
Generation : 2024-11-19 10:34:36