

## TEST CASE 1:

输入：

10

8 5 9 7 1 12 2 4 11 3

9 5 1 7 2 12 8 4 3 11

输出：

Test 1 (多组)

Input a key : 12

The parent of key(12) is : key(7)

Input a key : 1

The parent of key(1) is : key(7)

Input a key : 5

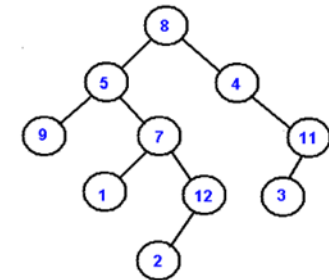
The parent of key(5) is : key(8)

Input a key : 11

The parent of key(11) is : key(4)

Input a key : 2

The parent of key(2) is : key(12)



Test 2

Is a sort tree? : NO

Test 3

The preorder is : 8 4 11 3 5 7 12 2 1 9

The inorder is : 11 3 4 8 12 2 7 1 5 9

TEST CASE 2:

输入：

8

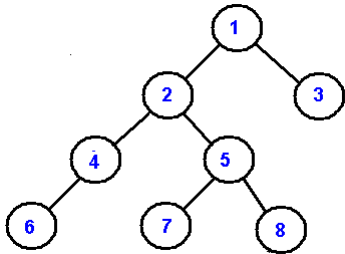
1 2 4 6 5 7 8 3

6 4 2 7 5 8 1 3

输出：

Test 1 (多组)

-----  
Input a key : 2  
The parent of key(2) is :       key(1)  
Input a key : 5  
The parent of key(5) is :       key(2)  
Input a key : 6  
The parent of key(6) is :       key(4)  
Input a key : 3  
The parent of key(3) is :       key(1)  
Input a key : 8  
The parent of key(8) is :       key(5)



Test 2

-----  
Is a sort tree? :                       NO

Test 3

-----  
The preorder is :                       1 3 2 5 8 7 4 6  
The inorder is :                        3 1 8 5 7 2 4 6

## TEST CASE 3:

输入：

10

2 8 10 14 15 9 13 5 12 7

14 10 15 8 9 13 2 12 5 7

输出：

Test 1 (多组)

Input a key : 15

The parent of key(15) is : key(10)

Input a key : 13

The parent of key(13) is : key(9)

Input a key : 12

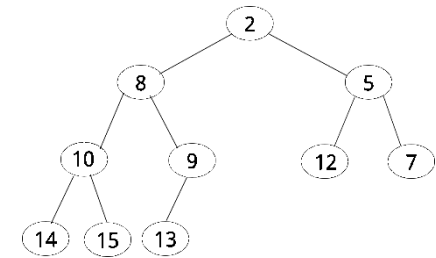
The parent of key(12) is : key(5)

Input a key : 7

The parent of key(7) is : key(5)

Input a key : 8

The parent of key(8) is : key(2)



Test 2

Is a sort tree? : NO

Test 3

The preorder is : 2 5 7 12 8 9 13 10 15 14

The inorder is : 7 5 12 2 13 9 8 15 10 14

TEST CASE 4:

输入：

4

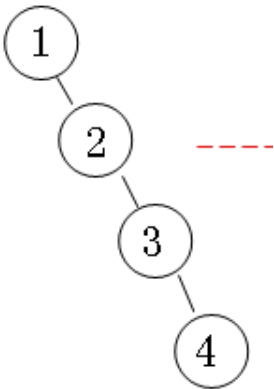
1 2 3 4

1 2 3 4

输出：

Test 1 (多组)

-----



Test 2

-----

Is a sort tree? : YES

Test 3

-----

The preorder is : 1 2 3 4

The inorder is : 4 3 2 1

TEST CASE 5:

输入：

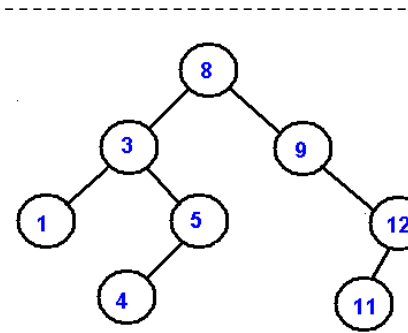
8

8 3 1 5 4 9 12 11

1 3 4 5 8 9 11 12

输出：

Test 1 (多组)



Test 2

-----

Is a sort tree? : YES

Test 3

-----

The preorder is : 8 9 12 11 3 5 4 1

The inorder is : 12 11 9 8 5 4 3 1

TEST CASE 6:

输入：

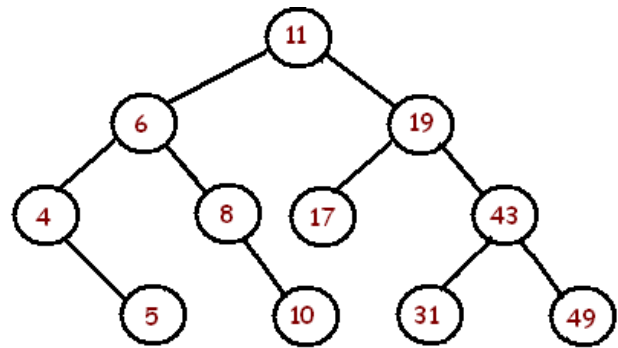
11

11 6 4 5 8 10 19 17 43 31 49

4 5 6 8 10 11 17 19 31 43 49

输出：

Test 1 (多组)



Test 2

Is a sort tree? : YES

Test 3

The preorder is : 11 19 43 49 31 17 6 8 10 4 5

The inorder is : 49 43 31 19 17 11 10 8 6 5 4

TEST CASE 7:

输入：

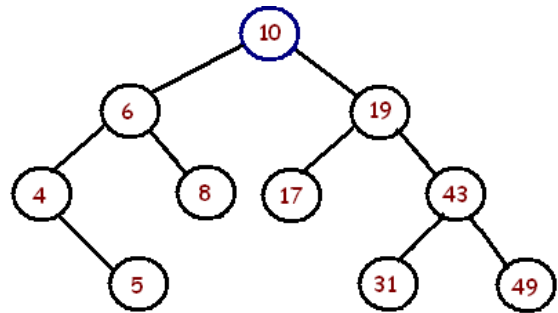
10

10 6 4 5 8 19 17 43 31 49

4 5 6 8 10 17 19 31 43 49

输出：

Test 1 (多组)



Test 2

Is a sort tree? : YES

Test 3

The preorder is : 10 19 43 49 31 17 6 8 4 5

The inorder is : 49 43 31 19 17 10 8 6 5 4

TEST CASE 8:

输入：

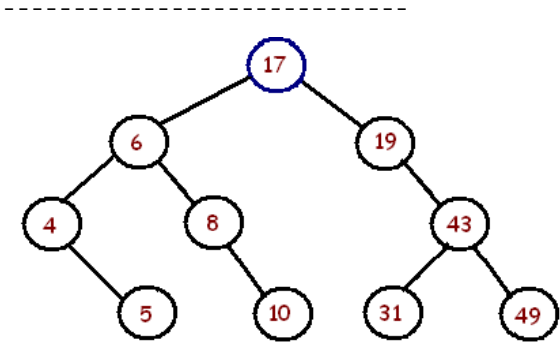
10

17 6 4 5 8 10 19 43 31 49

4 5 6 8 10 17 19 31 43 49

输出：

Test 1 (多组)



Test 2

-----  
Is a sort tree? : YES

Test 3

-----  
The preorder is : 17 19 43 49 31 6 8 10 4 5  
The inorder is : 49 43 31 19 17 10 8 6 5 4



TEST CASE 9:

输入：

9

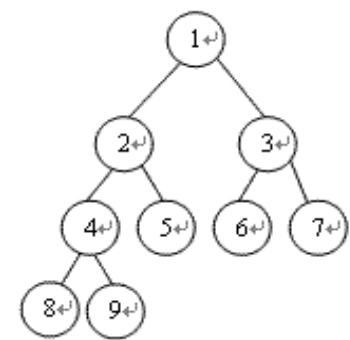
1 2 4 8 9 5 3 6 7

8 4 9 2 5 1 6 3 7

输出：

Test 1 (多组)

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Test 2

-----

Is a sort tree? : NO

Test 3

-----

The preorder is : 1 3 7 6 2 5 4 9 8

The inorder is : 7 3 6 1 5 2 9 4 8

TEST CASE 10:

输入：

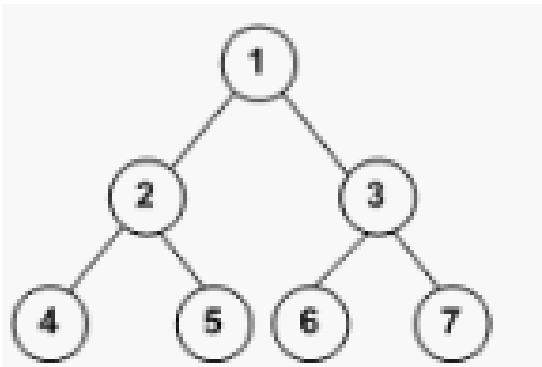
7

1 2 4 5 3 6 7

4 2 5 1 6 3 7

输出：

Test 1 (多组)



Test 2

Is a sort tree? : NO

Test 3

The preorder is : 1 3 7 6 2 5 4

The inorder is : 7 3 6 1 5 2 4