Given a binary search tree and the lowest and highest boundaries as L and R, trim the tree so that all its elements lies in [L, R] (R >= L). You might need to change the root of the tree, so the result should return the new root of the trimmed binary search tree.

**Example 1:**

**Input:**

1

/ \

0 2

L = 1

R = 2

**Output:**

1

\

2

**Example 2:**

**Input:**

3

/ \

0 4

\

2

/

1

L = 1

R = 3

**Output:**

3

/

2

/

1