Binary Search Tree : Lowest Common Ancestor

You are given pointer to the root of the binary search tree and two values v_1 and v_2. You need to return the lowest common ancestor (LCA) of v_1 and v_2 in the binary search tree. You only need to complete the function.

Input Format

You are given a function,

```
node * LCA (node * root ,int v1,int v2)
{

}
```

It is guaranteed that v1 and v2 are present in the tree.

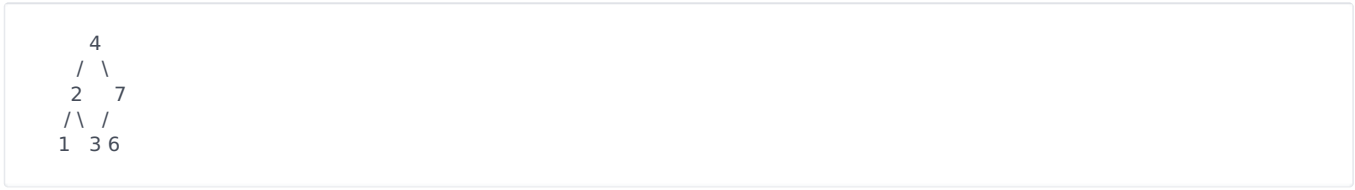
Node is defined as :

```
struct node
{
int data;
node * left;
node * right;
}node;
```

Output Format

Return the LCA of v_1 and v_2.

Sample Input



$v_1 = 1$ and $v_2 = 7$.

Sample Output

LCA of 1 and 7 is 4 (which is the root).
Return a pointer to the root in this case.