

C-9.1

Algorithm findAllElements(k, v, c):

Input: The search key k , a node of the binary search tree v and a container c

Output: An iterator containing the found elements

```
if  $v$  is an external node then
    return  $c.elements()$ 
if  $k = \text{key}(v)$  then
     $c.addElement(v)$ 
    return findAllElements( $k, T.rightChild(v), c$ )
else if  $k < \text{key}(v)$  then
    return findAllElements( $k, T.leftChild(v)$ )
else
    {we know  $k > \text{key}(v)$ }
    return findAllElements( $k, T.rightChild(v)$ )
```

Note that after finding k , if it occurs again, it will be in the left most internal node of the right subtree.