Given the following input as an example, create a program in C# that will parse the input and recursively trace the branches that each tag has.

For example, if your list is the following:

pbga

xhth

ebii

havc

ktlj

fwft -> ktlj, cntj, xhth

qoyq

padx -> pbga, havc, qoyq

tknk -> ugml, padx, fwft

jptl

ugml -> gyxo, ebii, jptl

gyxo

cntj

...then you would be able to recreate a tree structure that looks like this:

gyxo

/

ugml - ebii

/ \

| jptl

|

| pbga

/ /

tknk --- padx - havc

\ \

| qoyq

|

| ktlj

\ /

fwft - cntj

\

xhth

In this example, the ‘tknk’ tag is at the bottom of the tree, and is holding up ‘ugml’, ‘padx’, and ‘fwft’. Those tags are, in turn, holding up other tags; in this example, none of those tags are holding up any other tags, and are all the ends of their own branches.

In this example tag ‘tknk’ is the name of the bottom tag. What is the name of the bottom tag that is given in your input file?