

U0LPMPL2U : If you have a `fold` defined it becomes pretty easy. Just return the current node if it isn't the one you want to update, otherwise update the node

U4F64AKQV : <@U1G51S63S> What are you using the tree for? This seems like an XY problem to me.

U1G51S63S : I thought to have a fold for reducing a list of values into another list and separated recursive function for updating values in accumulator

U1G51S63S : <@U4F64AKQV>

U1G51S63S : I want to display thing like this

U0LPMPL2U : `List.foldl` is recursion over a list. You could also implement a `Tree.fold`

U1G51S63S : but from API I got plain list of records with LTREE keys (postgresql thing) like `Mahnattan.Bedford-St.Ocean\_hill`

U0LPMPL2U : In your case, what your probably want a tree map function. Something like:```

```
Tree.map (\node -> if node.key == "some.key" then Tree.addChild child node else node)
```

...

U0LPMPL2U : none of these functions exist though :stuck\_out\_tongue:

U4F64AKQV : So the issue is parsing the strings to create a tree structure?

U1G51S63S : <@U4F64AKQV> creating a tree structure yeah. this is Elixir code which doing what I need but with dicts and not lists ```

```
|> Enum.reduce(%{}, fn (area, acc) -> {name, path} =
  area.path
  |> String.split(".")
  |> List.pop_at(-1)
```

```
node = %{children: %{},
  id: area.id,
  name: area.name}
```

```
case path do
  [] ->
    Map.put_new(acc, name, node)
  path ->
    full_path =
      Enum.intersperse(path, :children) ++ [:children, name]
    put_in(acc, full_path, node)
end
```

...

U1G51S63S : <@U0LPMPL2U> I thought reducing is a `n - 1` op, where recursion is here?

U1G51S63S : so basically it's iterating over all items while keeping acc, no?

U1G51S63S : or you mean under hood with head/tail?

U4F64AKQV : So why not use an Elm `Dict` then?

U1G51S63S : btw I can't get you idea with Tree.map :disappointed:

U0LPMPL2U : `List` is a recursive structure, therefore "iterating" is done recursively (although the compiler may turn that back into iteration)

U1G51S63S : <@U4F64AKQV> a I am figured out how to do it with Dict already, just want to try with List :slightly\_smiling\_face:

U4F64AKQV : The current impl of `foldr` happens to use a for loop. It converts the list to a JS array and iterates over it.

U0LPMPL2U : So if you wanted to update a value in a list, you could do something like this right?

...

```
updateList : a -> a -> List a -> List a
updateList oldValue newValue list =
  List.map (\val -> if val == oldValue then newValue else n) list
```

...

U1G51S63S : yep, correct. but problem is with nested update

U1G51S63S : so as I thought it should be recursion like a -> b -> insert c to b.children -> b -> a

U0LPMPL2U : Imagine that `Tree.map` visits all children recursively, just like `List.map` can do for a list

U1G51S63S : ok, done :smile:

U0LPMPL2U : This discusses `Tree.map` and an implementation for a binary tree

<<https://evancz.gitbooks.io/functional-programming-in-elm/recursion/binary-trees.html>>

U1G51S63S : &gt; A binary tree is either empty or it is a node with a value and \*two subtrees\*

U23SA861Y : yes, either one of which could be empty

U0LPMPL2U : Notice that node 9 has two children: 7 and "empty"

U1G51S63S : hmm, yeah. just read again Insert section and got idea. will try to implement it now for my case

:thumbsup: