

## Recursive Functions Must Be Well-Defined for Computers

If you

- write a recursive function
- that is not well-defined,
- **don't expect a computer to choose.**

As you know, **computers are dumb.**

Some well-defined recursive functions

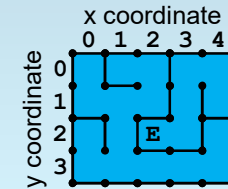
- may still be difficult or impossible to express
- in a computer language.

## Time for the Today's "Help Prof. Lumetta" Problem!

*I need your help again.*

If I build a new house

- as a maze ...
- ... like that ...
- **can I go from (0,0)**
- **to the exit at E?**



## How Did you Solve the Maze?

How did you know?

And, more importantly...

...can you teach my computer?

## We Can Use a Tree to Solve the Problem

Maybe you used a tree?

(When we run out of ways to go, we won't have found the exit.)

