Fun with recursion!

Expansion on the maze search example with some debugging.

- Check out the code (copy in everyone's repository this time)
  - review maze.h contents (same as class, except mazes are dynamically allocated instead of file scope)

- expt.c — three parts in main — comment out two at a time
  - use 'make' to compile
  - first part: bug in create_maze (maze.c)
    - should look like that
    - make, then execute ('/expt') to see problem
      - fix it! (then commit)

- second part: can you change mark found, recurse to reduce # calls to # squares found?
  - (if # squares changes, you have broken the code!)
- Third part: Experiment with reachability as a function of wall density

Start in middle

Each interior wall is present/not present based on (Bernoulli) random variables

Some % chance to be present

What fraction of maze can be reached as function of % chance?

Look at graph.pdf

Can you predict?

Run some experiments yourself

`> ./expt > outputfile`

Look at "graph" - a gnuplot script

Feel free to modify

To execute, "gnuplot graph" (produces graph.ps)

"ps2pdf graph.ps" creates graph.pdf