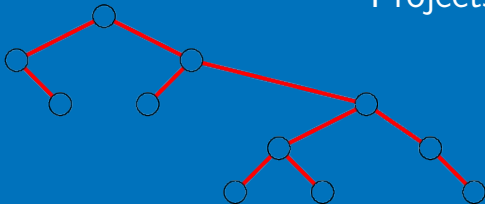


# Experimental Combinatorics using Sage

Projects presentation

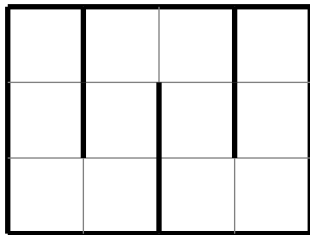


EAUMP summer school 2015

# Random Labyrinth



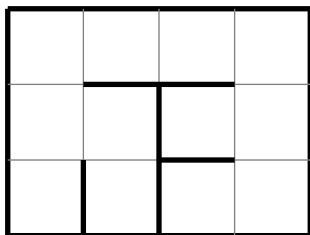
## Definition



A **labyrinth** is a rectangular enclosure of some  $1 \times 1$  square rooms that can be separated by some walls such that:

1. All rooms are connected by a wall-free path
2. There is no loop

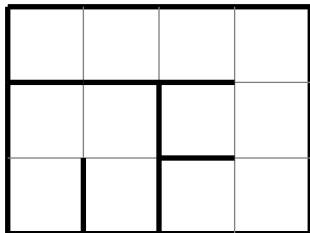
## Definition



A **labyrinth** is a rectangular enclosure of some  $1 \times 1$  square rooms that can be separated by some walls such that:

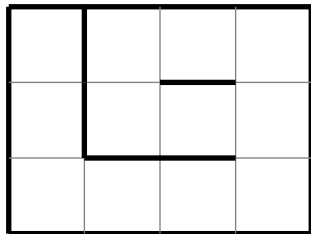
1. All rooms are connected by a wall-free path
2. There is no loop

# Definition



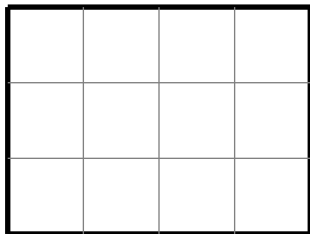
Not a labyrinth

# Definition

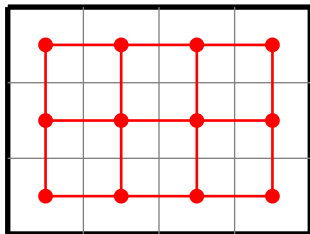


Not a labyrinth

Another way to see it...

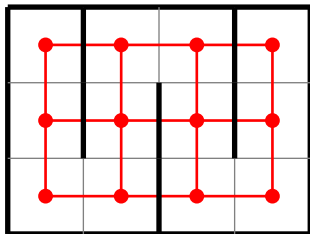


Another way to see it...

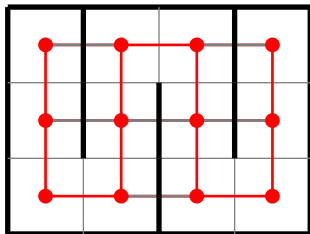




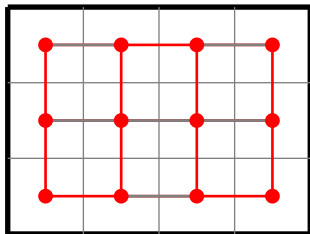
Another way to see it...



Another way to see it...

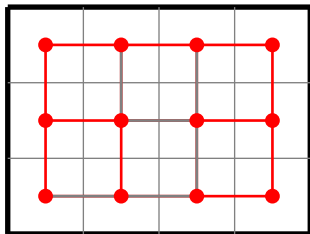


Another way to see it...



A labyrinth is a **spanning tree** of a given graph.

Another way to see it...



A labyrinth is a **spanning tree** of a given graph.

