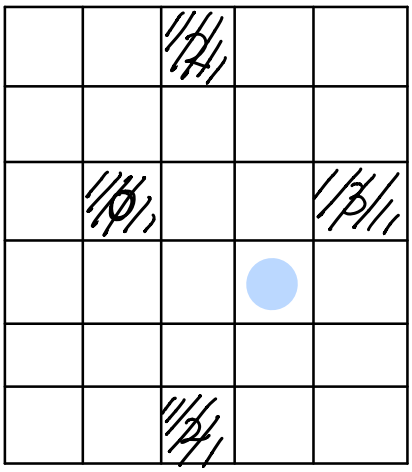
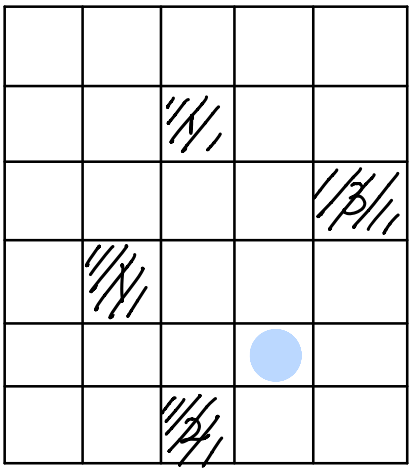
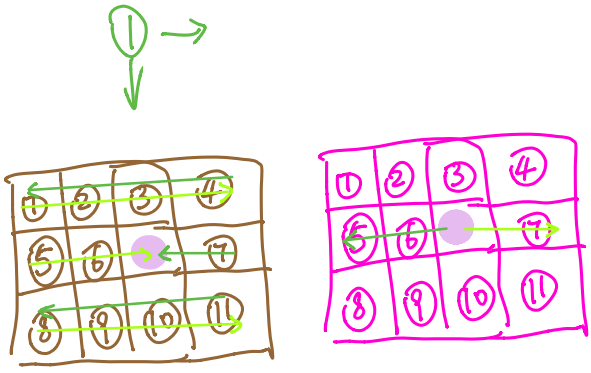




Wormholes

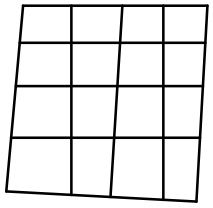
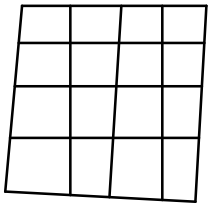


Bulb / Stone / Wormhole /

Puzzle Creating Logic:

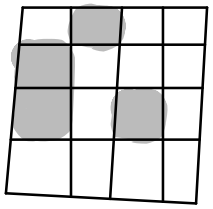
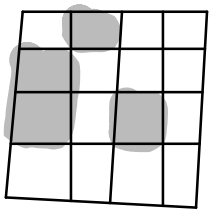
① Initialization:

given size (eg: 4x4) → 2 empty grids.

② Add walls (Black Square)

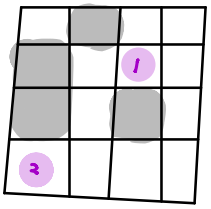
given percentage of black squares (eg: 25%)

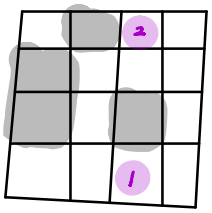



③ Add wormholes in empty cells

is selected by user

1/2 ?





④ Add light bulbs

add in ① untill no ① is { empty / not lit by othe bulbs.

* priority: { ① empty cells adjacent to walls → (easy to use # in black squares to restrict bulbs' location) → higher probability to be unique solution
② Other cells.

According to , randomly add light

(empty cell = no { wall / light bulb / wormhole)

⑤ Add numbers on walls:

based on Difficulty { easy : Record # on all walls
hard : Remain some walls without #

⑥ Verify whether it is unique solution

if { yes : print puzzle & solution
no : redo ② ③ ④ ⑤