

LIGHT UP

46 Handcrafted Puzzles from Beginner to Expert · Solutions Included

Alternative Names: Akari (あかり) · Bijutsukan (美術館) · Museum Guard Puzzles · Lanterns

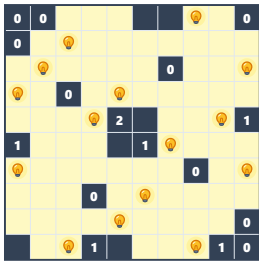
How to Play & Rules

- Place light bulbs in white cells so that every white cell is illuminated.
- Each light bulb shines rays horizontally and vertically across white cells until blocked by a black cell or the grid edge.
- No Two Bulbs May Clash: No two bulbs can shine on each other (they cannot share a row or column without at least one black barrier between them).
- Clues on Black Cells: A number on a black cell indicates exactly how many bulbs must be placed in orthogonally adjacent white cells (0, 1, 2, 3, or 4).
- Unnumbered black cells may have any count of adjacent light bulbs.

Every puzzle has exactly one valid solution, deducible purely through logical reasoning.

Difficulty Levels (46 Puzzles)

Stage	Grid Sizes	Puzzles
Intro	5×5	3
Easy	5×5 to 6×6	12
Medium	7×7 to 8×8	12
Hard	8×8 to 10×10	12
Expert	10×10	10



Solved Level Example

Play 100+ Levels Online with Instant Validation

Enjoy interactive play with step-by-step hints, conflict checkers, and unlimited undo on AZTest.

<https://aztest.org/puzzles/lightup/>

Discover 25+ free logic games on AZTest: Slitherlink, Nurikabe, Calcudoku, Masyu, Galaxies, Hitori, Tents, and more.

LIGHT UP — WHAT IS ALLOWED & WHAT IS NOT ALLOWED

Visual guide illustrating correct moves versus rule violations

Illumination & Light Rays

Each light bulb shines light horizontally and vertically until blocked by a black cell or the grid edge. Every white cell must be illuminated.



✓ **ALLOWED**

Every white cell is illuminated by at least one bulb. Light rays pass through empty cells and stop at black walls.



✗ **NOT ALLOWED**

Unlit cell: the white cell at (2, 0) is not reached by any light bulb. All white cells must be lit.



✗ **NOT ALLOWED**

Bulb on a black wall: light bulbs may only be placed in white cells, never on black cells.

No Mutual Illumination (Bulb Conflicts)

No two light bulbs may shine on each other. Two bulbs cannot share a row or column unless there is a black wall between them.



✓ **ALLOWED**

Allowed: two bulbs share column 2, but the black wall between them blocks their light so they do not shine on each other.



✗ **NOT ALLOWED**

Row clash: two bulbs in the top row shine directly on each other with no black wall between them. This is not allowed.



✗ **NOT ALLOWED**

Column clash: two bulbs in the first column shine directly on each other without an intervening wall.

Numbered Black Cells

A number on a black cell indicates the exact count of light bulbs in its orthogonally adjacent white cells. Unnumbered black cells have no count restriction.



✓ **ALLOWED**

The black cell marked 2 has exactly two orthogonally adjacent bulbs placed beside it.



✗ **NOT ALLOWED**

Too many bulbs: the cell marked 2 has 3 adjacent bulbs. The count must match the clue exactly.



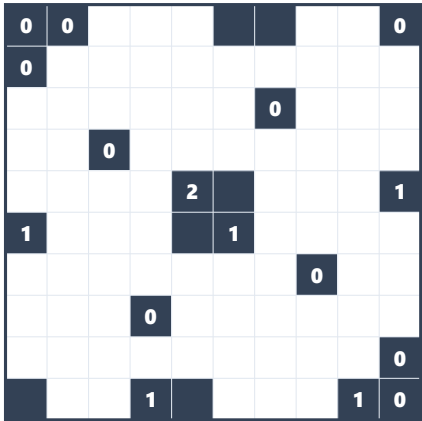
✗ **NOT ALLOWED**

Not enough bulbs: the cell marked 2 has only 1 adjacent bulb.

Puzzle #1

MEDIUM

10 × 10



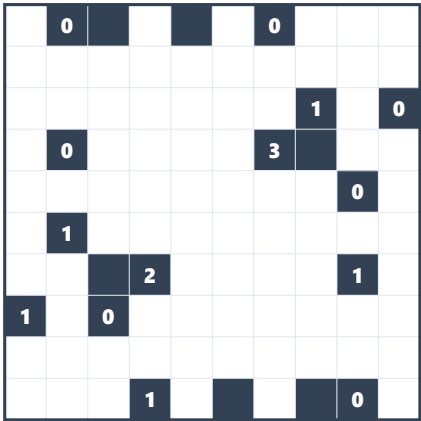
Play online: [lightup/#13](#)

AZTest · [aztest.org](#)

Puzzle #2

MEDIUM

10 × 10



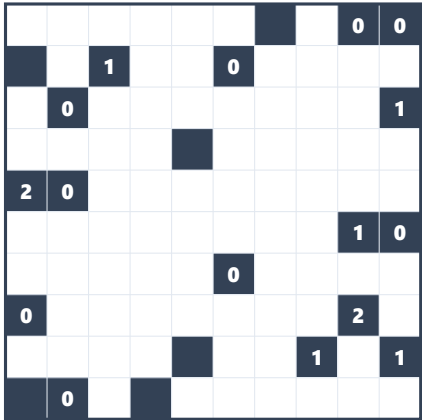
Play online: [lightup/#14](#)

AZTest · [aztest.org](#)

Puzzle #3

MEDIUM

10 × 10



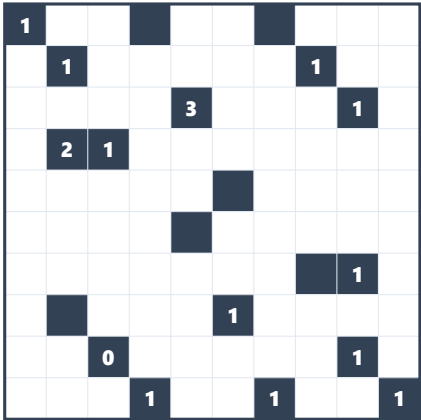
Play online: [lightup/#15](#)

AZTest · [aztest.org](#)

Puzzle #4

MEDIUM

10 × 10



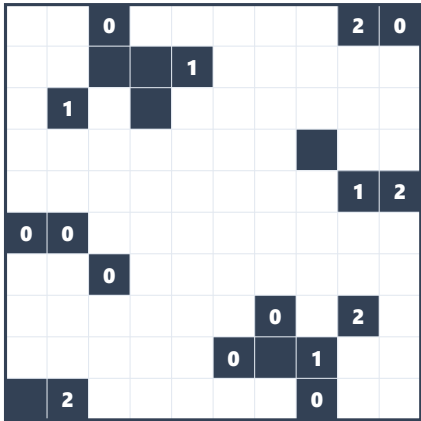
Play online: [lightup/#17](#)

AZTest · [aztest.org](#)

Puzzle #5

MEDIUM

10 × 10



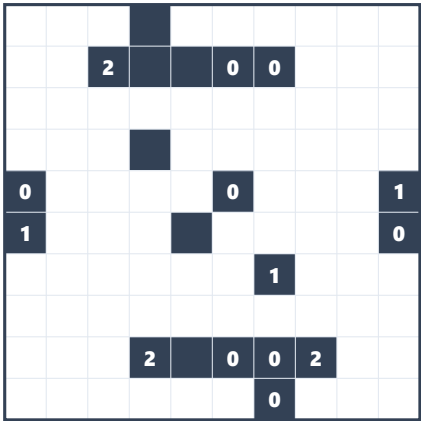
Play online: [lightup/#18](#)

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Puzzle #6

MEDIUM

10 × 10



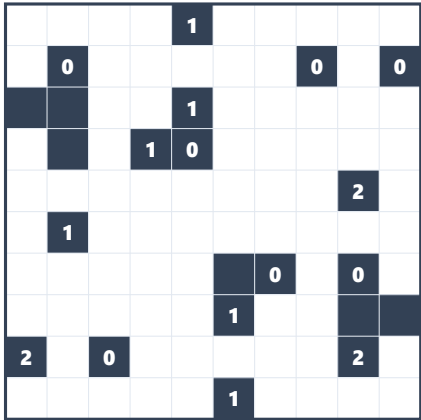
Play online: [lightup/#19](#)

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Puzzle #7

MEDIUM

10 × 10



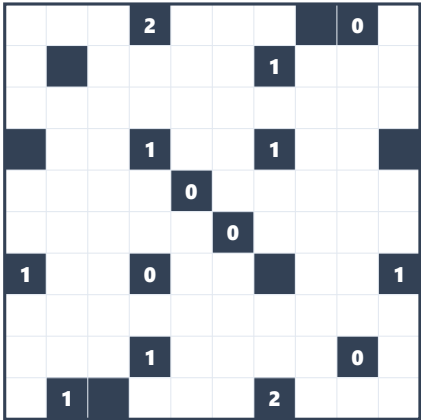
Play online: [lightup/#20](#)

AZTest · [aztest.org](#)

Puzzle #8

MEDIUM

10 × 10



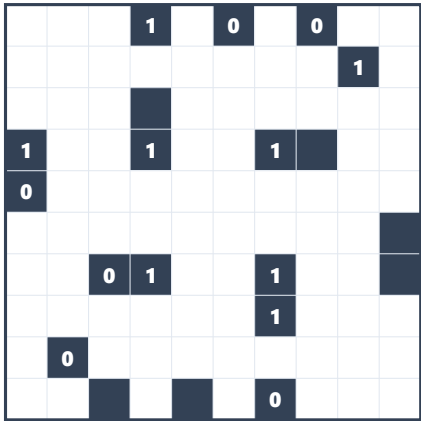
Play online: [lightup/#21](#)

AZTest · [aztest.org](#)

Puzzle #9

MEDIUM

10 × 10



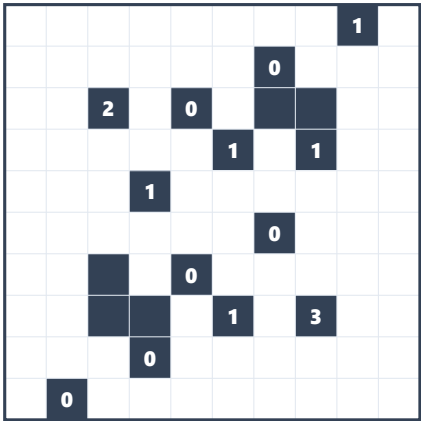
Play online: [lightup/#22](#)

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Puzzle #10

MEDIUM

10 × 10



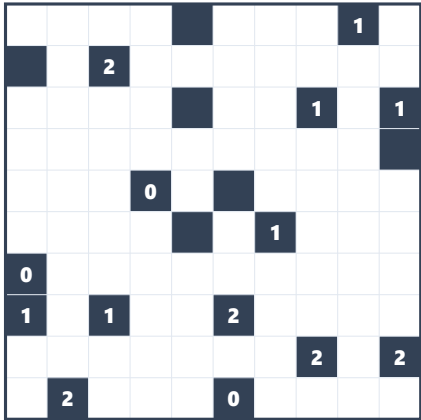
Play online: [lightup/#24](#)

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Puzzle #11

MEDIUM

10 × 10



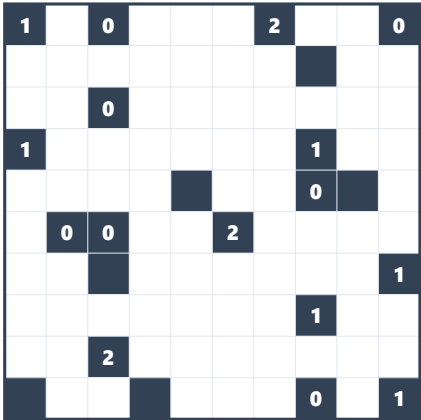
Play online: [lightup/#25](#)

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Puzzle #12

MEDIUM

10 × 10



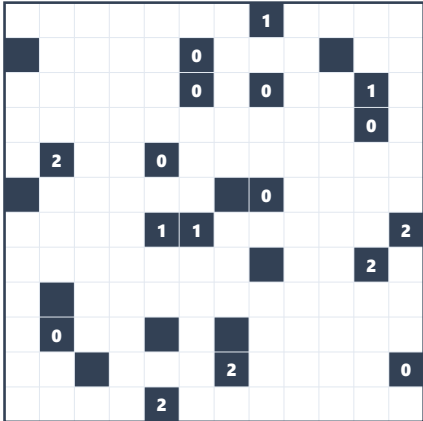
Play online: [lightup/#26](#)

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Puzzle #13

HARD

12 × 12



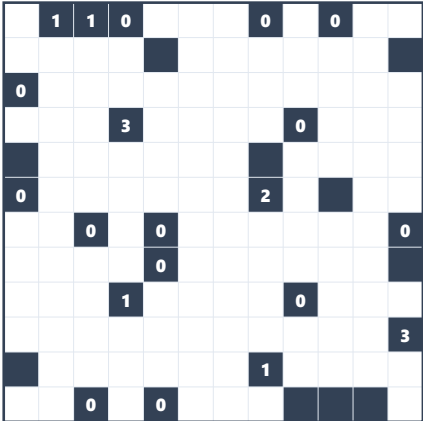
Play online: [lightup/#27](#)

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Puzzle #14

HARD

12 × 12



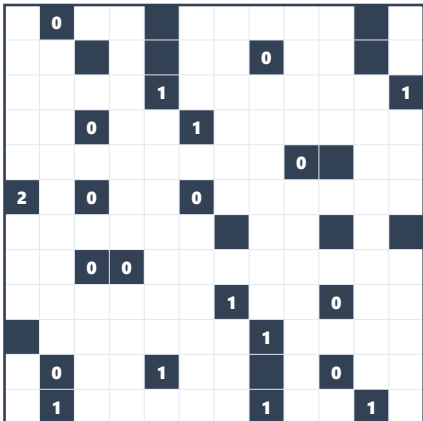
Play online: [lightup/#28](#)

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Puzzle #15

HARD

12 × 12



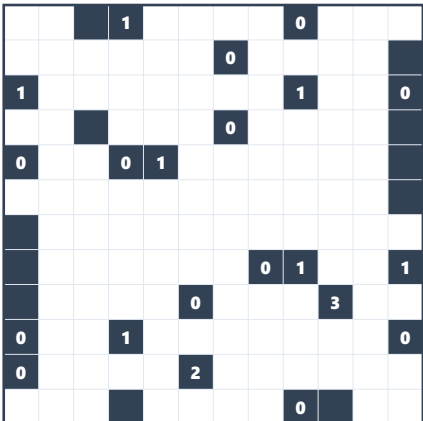
Play online: [lightup/#29](#)

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Puzzle #16

HARD

12 × 12



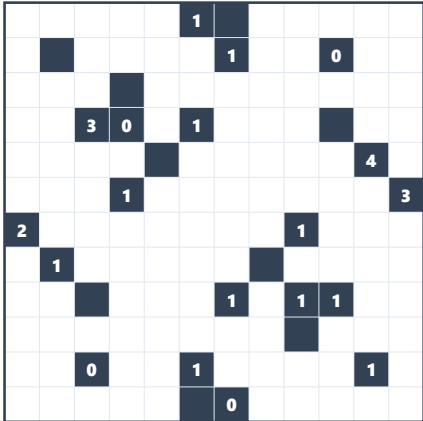
Play online: [lightup/#31](#)

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Puzzle #17

HARD

12 × 12



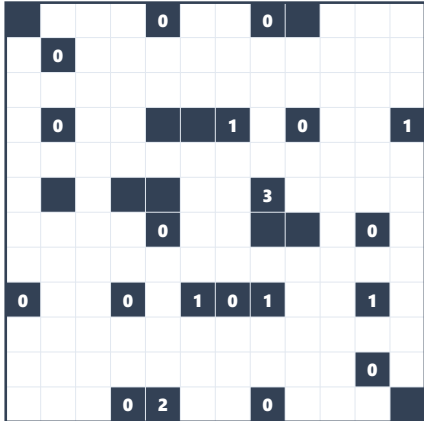
Play online: [lightup/#32](#)

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Puzzle #18

HARD

12 × 12



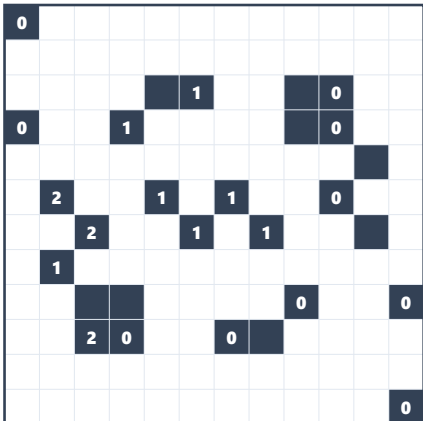
Play online: [lightup/#33](#)

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Puzzle #19

HARD

12 × 12



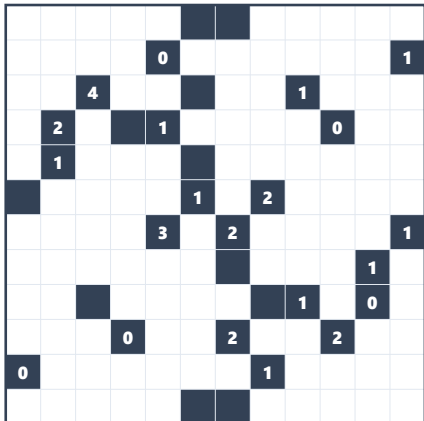
Play online: [lightup/#34](#)

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Puzzle #20

HARD

12 × 12



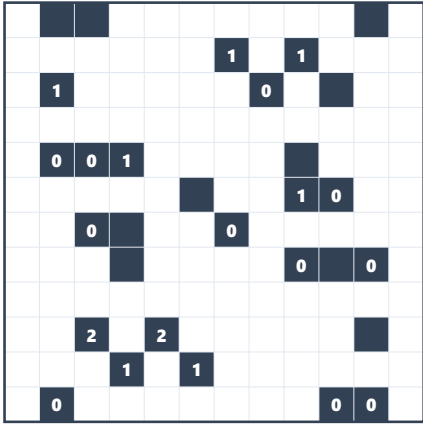
Play online: [lightup/#35](#)

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Puzzle #21

HARD

12 × 12



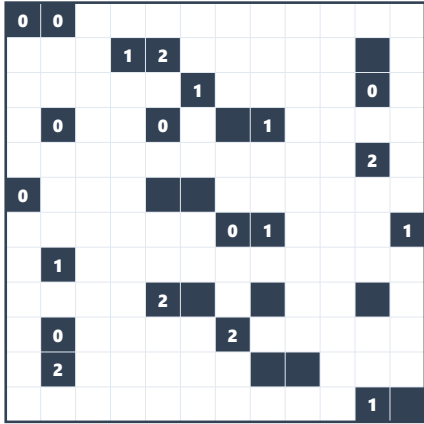
Play online: [lightup/#36](#)

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Puzzle #22

HARD

12 × 12



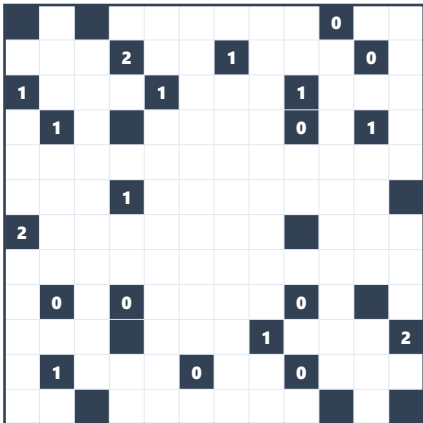
Play online: [lightup/#38](#)

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Puzzle #23

HARD

12 × 12



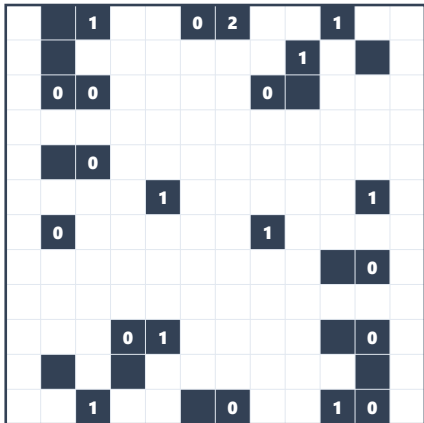
Play online: [lightup/#39](#)

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Puzzle #24

HARD

12 × 12



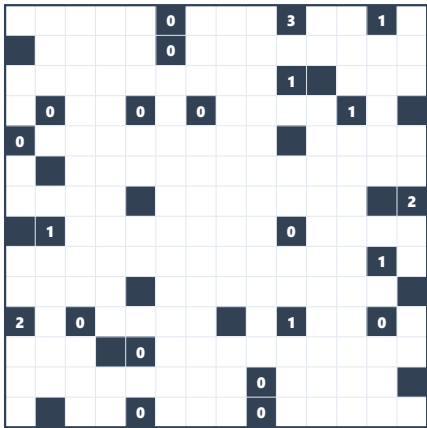
Play online: [lightup/#40](#)

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Puzzle #25

EXPERT

14 × 14



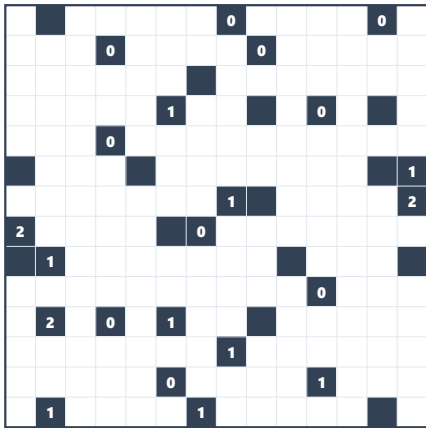
Play online: [lightup/#41](#)

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Puzzle #26

EXPERT

14 × 14



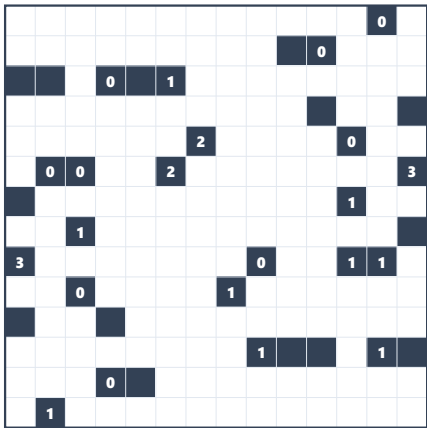
Play online: [lightup/#42](#)

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Puzzle #27

EXPERT

14 × 14



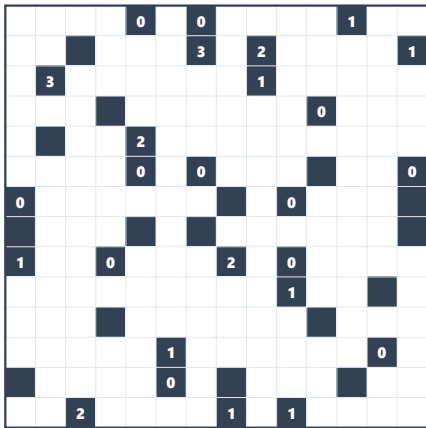
Play online: [lightup/#43](#)

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Puzzle #28

EXPERT

14 × 14



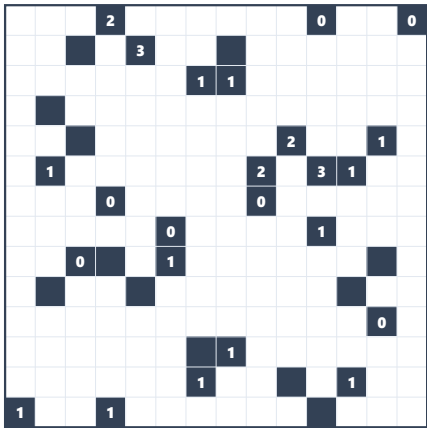
Play online: [lightup/#44](#)

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Puzzle #29

EXPERT

14 × 14



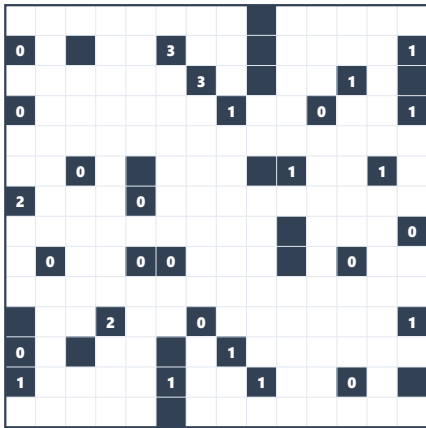
Play online: [lightup/#45](#)

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Puzzle #30

EXPERT

14 × 14



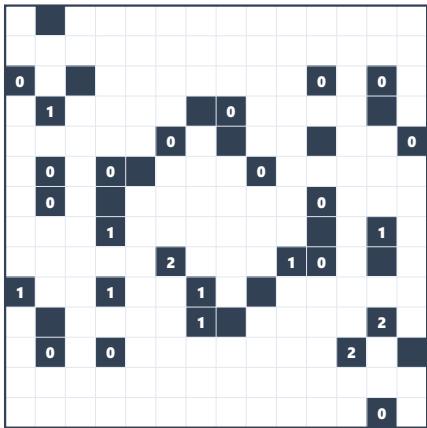
Play online: [lightup/#46](#)

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Puzzle #31

EXPERT

14 × 14



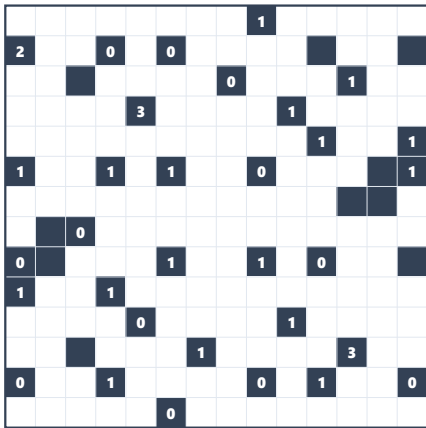
Play online: [lightup/#47](#)

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Puzzle #32

EXPERT

14 × 14



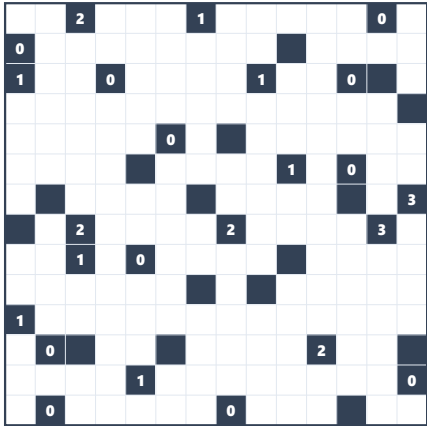
Play online: [lightup/#48](#)

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Puzzle #33

EXPERT

14 × 14



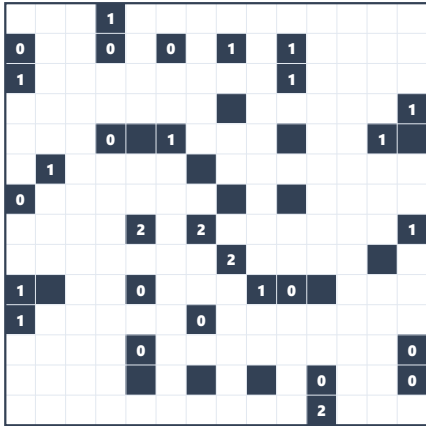
Play online: [lightup/#49](#)

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Puzzle #34

EXPERT

14 × 14



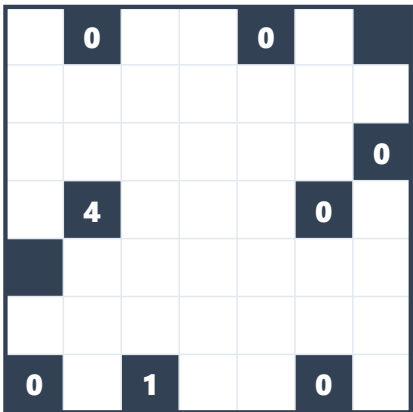
Play online: [lightup/#50](#)

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Puzzle #35

STARTER

7 × 7



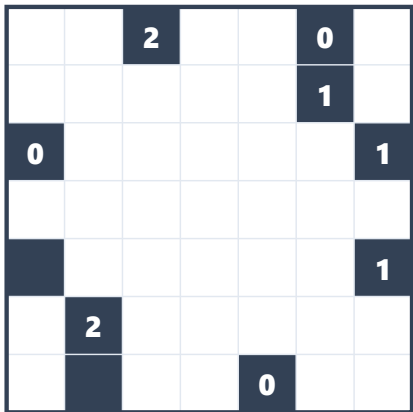
Play online: [lightup/#1](#)

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Puzzle #36

STARTER

7 × 7

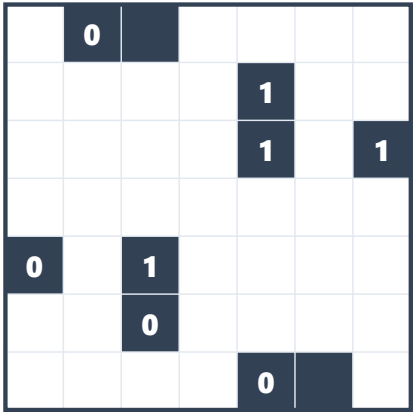


Play online: [lightup/#2](#)

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Puzzle #37 STARTER

7 × 7

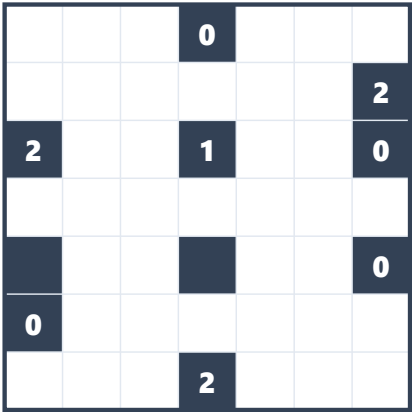


Play online: [lightup/#3](#)

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Puzzle #38 STARTER

7 × 7

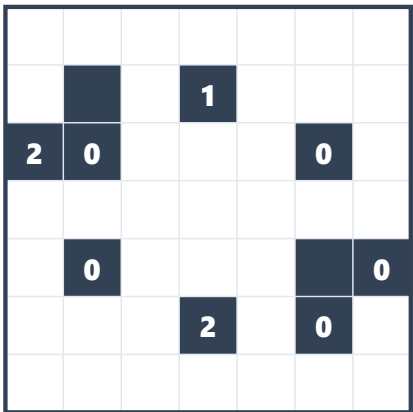


Play online: [lightup/#4](#)

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Puzzle #39 STARTER

7 × 7

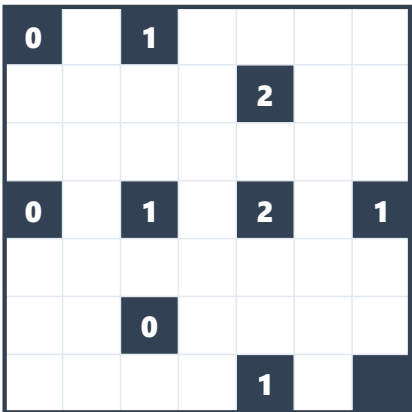


Play online: [lightup/#5](#)

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Puzzle #40 STARTER

7 × 7

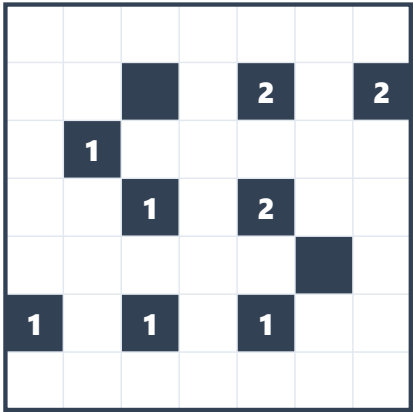


Play online: [lightup/#6](#)

AZTest · [aztest.org](#)

Puzzle #41STARTER

7 × 7

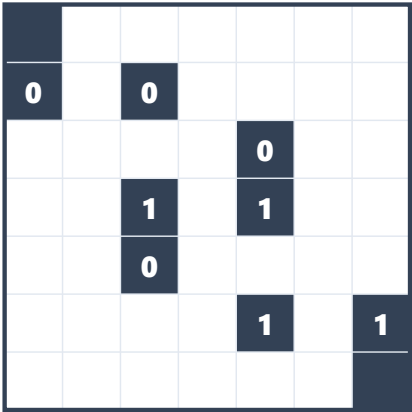


Play online: [lightup/#7](#)

AZTest · [aztest.org](#)

Puzzle #42STARTER

7 × 7

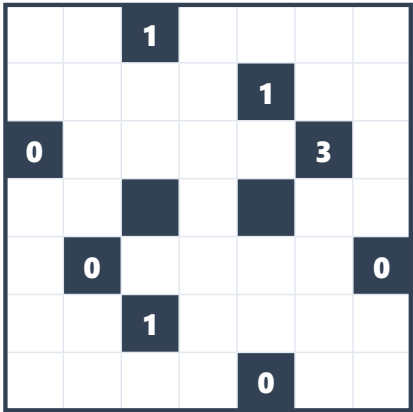


Play online: [lightup/#8](#)

AZTest · [aztest.org](#)

Puzzle #43STARTER

7 × 7

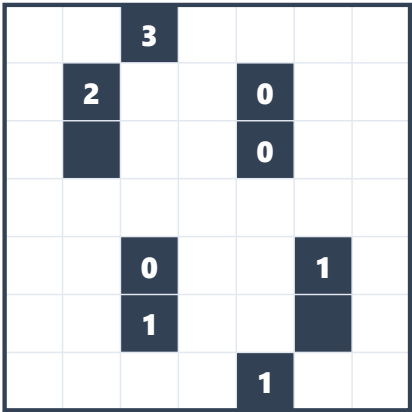


Play online: [lightup/#9](#)

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Puzzle #44STARTER

7 × 7

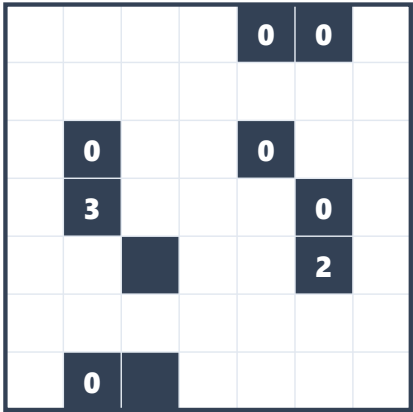


Play online: [lightup/#10](#)

AZTest · [aztest.org](#)

Puzzle #45 STARTER

7 × 7

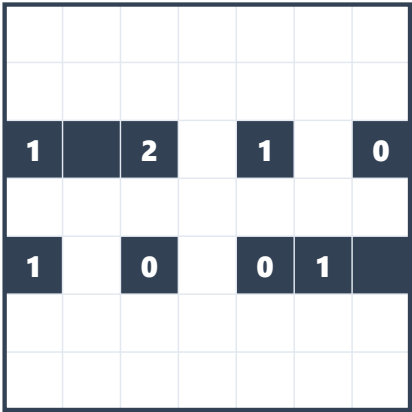


Play online: [lightup/#11](#)

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Puzzle #46 STARTER

7 × 7



Play online: [lightup/#12](#)

AZTest · [aztest.org](#)

LIGHT UP SOLUTIONS

Complete solved grids for Puzzles #1 to #12

Puzzle #1 Medium (10×10)

Puzzle #2 Medium (10×10)

Puzzle #3 Medium (10×10)

Puzzle #4 Medium (10×10)

Puzzle #5 Medium (10×10)

Puzzle #6 Medium (10×10)

Puzzle #7 Medium (10×10)

Puzzle #8 Medium (10×10)

Puzzle #9 Medium (10×10)

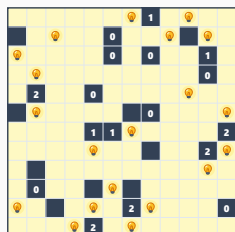
Puzzle #10 Medium (10×10)

Puzzle #11 Medium (10×10)

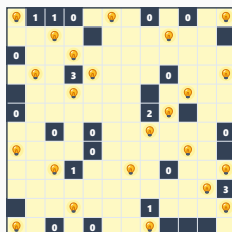
Puzzle #12 Medium (10×10)

Complete solved grids for Puzzles #13 to #24

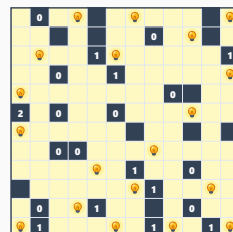
Hard (12×12)



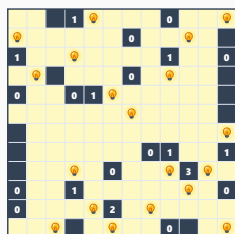
Hard (12×12)



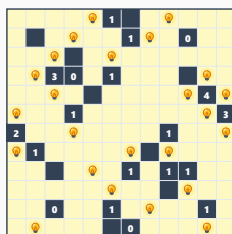
Hard (12×12)



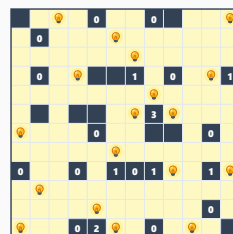
Hard (12×12)



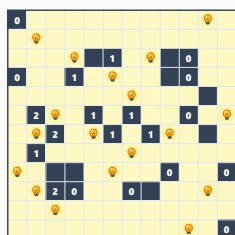
Hard (12×12)



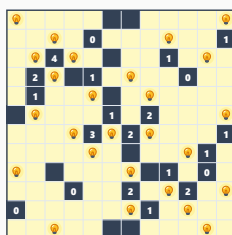
Hard (12×12)



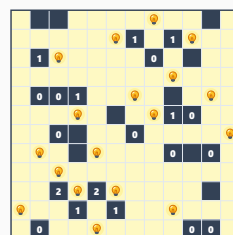
Hard (12×12)



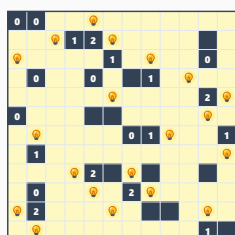
Hard (12×12)



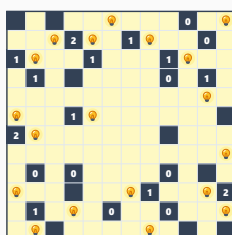
Hard (12×12)



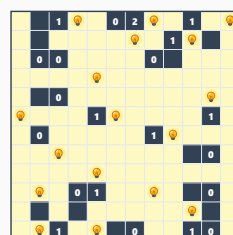
Hard (12×12)



Hard (12×12)



Hard (12×12)



LIGHT UP SOLUTIONS

Complete solved grids for Puzzles #25 to #36

Puzzle #25Expert (14×14)

Puzzle #26Expert (14×14)

Puzzle #27Expert (14×14)

Puzzle #28Expert (14×14)

Puzzle #29Expert (14×14)

Puzzle #30Expert (14×14)

Puzzle #31Expert (14×14)

Puzzle #32Expert (14×14)

Puzzle #33Expert (14×14)

Puzzle #34Expert (14×14)

Puzzle #35Starter (7×7)

Puzzle #36Starter (7×7)

LIGHT UP SOLUTIONS

Complete solved grids for Puzzles #37 to #46

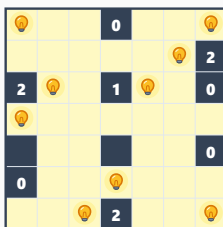
Puzzle #37

Starter (7×7)



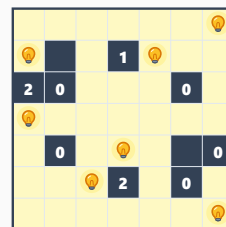
Puzzle #38

Starter (7×7)



Puzzle #39

Starter (7×7)



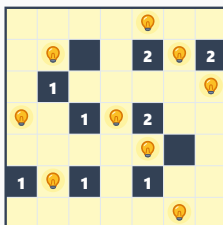
Puzzle #40

Starter (7×7)



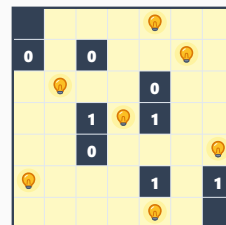
Puzzle #41

Starter (7×7)



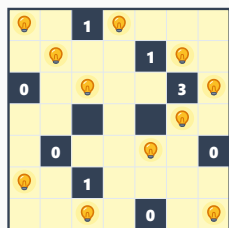
Puzzle #42

Starter (7×7)



Puzzle #43

Starter (7×7)



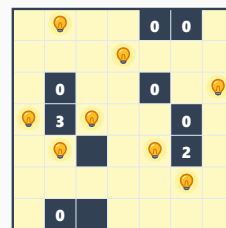
Puzzle #44

Starter (7×7)



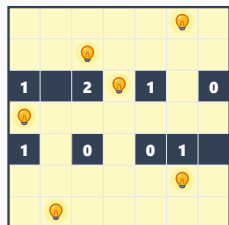
Puzzle #45

Starter (7×7)



Puzzle #46

Starter (7×7)



Congratulations on completing the puzzles!

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