# Welcome to my birthday puzzle collection. Enjoy! 

www.prasannaseshadri.wordpress.com

All Rules are taken from either of http://puzzleparasite.blogspot.com/ http://mellowmelon.wordpress.com/ and my blog linked above.

## Masyu

Masyu is a puzzle originally from nikoli. The object is to draw a single closed loop passing through adjacent squares. Some squares are marked with a black or white circle. At a white circle, the loop must go straight through. Additionally, it must turn on the square visited right before or right after the white circle (it may turn on both, but not neither). At a black circle, the loop must turn, and then go straight through both of the two adjacent squares. The solution is unique.


Puzzle No. 2

## Masyu[Optional Whites]

Follow Masyu Rules. Aditionally, the loop is not required to go through white circles. If a white circle is passed through, it functions as it would in a regular Masyu.


I tried to put in " 21 lol ". Didn't work out that well but it can still be found in there. ;)

Puzzle No. 3

## Heyawake

This genre is developed by Nikoli. Paint some cells black. Black cells are not allowed to touch eachother on the sides. The remaining white area has to be connected. The white area can't span more than two consecutive rooms in a single row or column. The numbers in the rooms indicate how many cells are to be painted black.

| 2 | 1 |  | 2 | 1 |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  | 2 |  |  |  |  |
|  | 2 | 1 |  |  | 1 |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  | 2 |  |  |  |  |  |  |
|  |  |  | 1 |  | 2 |  |  |  |  |
|  |  |  |  |  | 1 |  |  |  |  |
|  | 2 |  |  |  |  |  |  |  |  |
|  | 1 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |

Puzzle No. 4

## Yajilin

Yajilin is a puzzle originally from nikoli. Some cells contain a number and arrow. The object is to fill in some of the empty cells so that each number indicates how many filled cells its corresponding arrow points to. No two filled cells may be adjacent. Finally, the remaining cells must all be connected to form a single closed loop that passes through each empty cell once. Both the configuration of filled cells and the closed loop are unique.
Note - Sorry about the 2 " 1 "s. You can use them as clue cells with wrong numbers and so no direction. Cells adjacent to them are valid for shading.

|  |  |  |  | $\overrightarrow{2}$ | $\boxed{1}$ |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |  |
| $\overrightarrow{2}$ | $1 \uparrow$ |  |  |  |  | $\overleftarrow{2}$ | $1 \downarrow$ |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  | $2 \downarrow$ |  |  | $2 \uparrow$ |  |  |  |
|  |  |  | $1 \uparrow$ |  |  | $1 \downarrow$ |  |  |  |
|  |  |  |  | $\vdots$ | $\overrightarrow{2}$ |  |  |  |  |
|  |  |  |  | 1 | 1 |  |  |  |  |
| $2 \uparrow$ |  |  |  |  |  |  |  | $2 \uparrow$ |  |
| $\overrightarrow{1}$ |  |  |  |  |  |  |  |  | $\vdots$ |

Puzzle No. 5

## Nurikabe

Nurikabe is a puzzle originally from nikoli. The object is to determine whether each grid cell is filled in or not. Grid cells must be filled in so that all the black cells form one contiguous region, not counting squares touching at a corner to be adjacent, but it is not allowed to have a two by two square of black cells. Finally, each connected region of unfilled cells must contain exactly one number, which tells how many unfilled cells there are.
Note : '?'s means that cell will be part of a bunch of Unified cells of any number, including 1, but not zero, as in this cell cannot be shaded in.

Unrelated Note : Other than the use of just 2 s and 1 s this is not as themed as the rest. What I was trying for was 21 clues, and only after I made it did I realize I don't know how to count to 21. Ah well...

|  |  |  |  |  | 1 |  |  | 2 |  | 2 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  | 1 |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | 2 |  |  |
|  |  |  |  |  | 2 |  |  |  |  | $?$ |
|  | 1 |  |  |  |  |  | 1 |  |  |  |
|  |  |  |  |  | $?$ |  |  |  |  | 2 |
| 2 |  |  | 1 |  |  |  |  |  |  |  |
|  |  |  |  |  | 1 |  |  |  | 1 |  |
|  |  |  |  |  |  |  |  |  |  |  |
| 2 |  | $?$ |  | $?$ |  | 1 |  |  |  |  |
|  |  |  |  |  | 1 |  |  |  |  |  |

Puzzle No. 6

## Tapa

Tapa is a puzzle created by Serkan Yurekli. The object is to determine whether each grid cell is filled in or not. Grid cells must be filled in so that all the black cells form one contiguous region, not counting squares touching at a corner to be adjacent, but it is not allowed to have a two by two square of black cells. Clue cells with numbers may not be filled in and tell the length of each consecutive black cell block in the eight surrounding cells. Two cell blocks clued by two different numbers must be separated by at least one white cell.

|  | $r_{1}$ |  |  |  |  |  |  | 2 | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | 2 | 1 |  |  |  |  |
|  |  |  |  |  |  |  | 2 | $?$ |  |
|  | $?$ |  |  |  |  |  |  |  |  |
|  | $?$ |  |  | 2 | 1 |  |  |  |  |
|  |  |  |  | 2 | 1 |  |  | $?$ |  |
|  | $\mathbf{2}_{1}$ | $?$ | $?$ |  |  |  |  |  |  |
|  |  |  |  |  | 2 | 1 |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| $?$ | $\mathbf{2}_{1}$ |  |  |  |  |  |  | 2 |  |

## Puzzle No. 7

## Tapa Mosaic

This is a variation original to my blog to the best of my knowledge. ALL classic Tapa rules apply, except that even the clue cells can(not a necessity) be part of the Tapa wall. e.g. a " 5 " clue can make a " $X$ " shaped pentomino across the 9 cells it is in the middle of, but not a "P" shaped one.

Note : Question Marks can be any digit, including 0.

|  | $?$ | $?$ |  |  |  |  |  |  | $?$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $?$ |  |  | $?$ |  |  |  |  | $?$ | $?$ |  |
|  |  |  | $?$ |  |  |  | $?$ |  | $?$ |  |
|  |  | $?$ |  |  |  |  |  |  | $?$ |  |
|  | $?$ |  |  |  | 1 |  |  |  | $?$ |  |
| $?$ | $?$ | $?$ | $?$ | 1 | 1 | 1 | $?$ | $?$ | $?$ | $?$ |
|  | $?$ |  |  |  | 1 |  |  |  | $?$ |  |
|  | $?$ |  |  |  |  |  |  | $?$ |  |  |
|  | $?$ |  | $?$ |  |  |  | $?$ |  |  |  |
|  | $?$ | $?$ |  |  |  |  | $?$ |  |  | $?$ |
|  | $?$ |  |  |  |  |  |  | $?$ | $?$ |  |

## Slitherlink

Slitherlink is a puzzle originally from nikoli; you can see their description of the puzzle here. The object is to draw horizontal and vertical segments of unit length that connect the dots so that a single closed loop is formed. The loop cannot intersect itself. Numbers in the grid indicate how many of the four potential segments surrounding that square are contained in the loop. The solution is unique.

Note : Again, Question marks can mean any digit, including 0.


Puzzle No. 10

## Graffiti Snake

Paint some cells black to form a wall. The numbers outside the grid indicate the number of blackened cells in the corresponding direction, in order, as in a Paint by Number puzzle. If there is more than one blackened block in a row or column there has to be a white cell between the blocks. Additionally, a snake must pass through all the remaining white cells, moving horizontally and vertically and not touching itself, not even diagonally. The head and tail of the snake are given as the grey circles.


## Corral

Corral is a puzzle originally from nikoli. The object is to draw a single closed loop along the gridlines that does not intersect itself. The loop should enclose every number in the grid. Furthermore, if we treat the loop as a wall, the number tells how many grid squares in the loop can be seen from the number's square when looking vertically or horizontally, where the number's own square is counted. The solution is unique.

|  |  | 3 | 12 |  |  |  |  |  | 14 |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2 |  |  | $?$ |  |  |  | $?$ | 14 |  |
|  |  |  |  |  | $?$ |  |  |  | 11 |  |
|  |  |  |  | 17 |  |  |  |  | 12 |  |
|  |  |  | 12 |  |  |  |  |  | 11 |  |
|  |  | $?$ |  |  | 21 |  |  |  | $?$ |  |
| 8 |  |  |  |  |  |  |  | 14 |  |  |
| 8 |  |  |  |  |  |  |  | 11 |  |  |
| 8 | $?$ | $?$ | 14 | $?$ |  | $?$ | $?$ | 14 | 5 |  |
|  |  |  |  |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  | 5 |  |  |  |  |

## Akari

Akari is a puzzle originally from nikoli. The object is to place "lightbulbs" in some grid squares. Each lightbulb illuminates every square in each of the four compass directions (imagine a rook in chess) up until a black cell is hit. Every grid square must be illuminated, but no two lightbulbs may illuminate each other. A black cell with a number indicates how many of the four surrounding cells have a light bulb. The solution is unique.


## Akari[all 2s and 1s]

Akari is a puzzle originally from nikoli. The object is to place "lightbulbs" in some grid squares. Each lightbulb illuminates every square in each of the four compass directions (imagine a rook in chess) up until a black cell is hit. Every grid square must be illuminated, but no two lightbulbs may illuminate each other. A black cell with a number indicates how many of the four surrounding cells have a light bulb. The solution is unique. Additionally, all black cells having $\mathbf{1 / 2}$ lights adjacent to them are given. The rest will have to be 0,3 or 4 .


## LITS

This genre was developed by Nikoli.
Colour a shape of 4 orthogonally connected squares in each black bordered region so that all coloured squares form a single contiguous area. This area can't contain any $2 \times 2$ coloured squares. Two identical shapes in different regions can't touch eachother by a side. Rotations and reflections are considered the same shape.


Puzzle No. 15

## Anglers Tapa

This variation is original to my blog to the best of my knowledge. However, in this one l've used LMI TVC X rules rather than my own.
Using the Angler clues on the outside, draw paths to the fishes, these paths must be part of a connected Tapa wall, using Tapa clues inside the grid. The fish are part of the cell count for Angler clues and part of the Tapa wall. The wall cannot cross cells other than the Angler paths.


## Puzzle No. 16

## Yajisan Kazusan

Yajisan Kazusan is a puzzle originally from nikoli. The object is to shade in some of the grid squares. No two shaded squares should be adjacent, and all of the unshaded squares should be in one contiguous region - equivalently, any two unshaded squares should have a path joining them through adjacent unshaded squares. Squares with a number and arrow are clues, and may also be shaded or unshaded. If a clue is unshaded, the number tells how many shaded squares the arrow points to. If a clue is shaded, it gives no information (it can be right or wrong).


## Regional Yajilin

This is another original of mine. Follow normal Yajilin rules. Instead of the usual clues, numbers indicate the number of shaded cells in that region.

| 2 | 2 |  |  |  |  | 2 |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  | 2 |  |  |  | 1 |  |  |
|  |  | 1 |  |  |  |  |  |  | 1 |
|  |  |  | 1 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | 2 |  |  |  |  |
| 1 |  |  |  |  |  |  |  |  |  |
|  |  |  | 1 |  |  |  |  |  |  |
|  |  |  |  |  | 1 |  |  |  |  |

## Liar Slitherlink

This puzzle is based off of Nikoli's Slitherlink. Draw a single closed loop of horizontal and vertical segments passing through adjacent dots that does not intersect itself. A number tells how many of the four adjacent edges of the square are part of the loop.
In Liar Slitherlink, exactly one number in each row and column is false. You must determine which clues are the liars.


Puzzle No. 19

## Liar Loop

This genre was developed by Bram De Laat.
Draw a closed loop through all squares by running horizontally and vertically. The loop doesn't touch or cross itself. The numbers in a boldly marked area indicate that the loop never runs through this many cells consecutively. Whenever it passes through the area it always runs through either more or less cells than the given number.

| 2 |  |  | 5 |  |  | 1 |  | 3 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2 |  |  |  |  | 4 |  |  |  | 1 |
|  |  |  | 1 |  | 1 |  |  |  |  |
|  | 1 |  | 1 |  |  |  |  |  | 2 |
|  |  |  |  |  |  |  |  |  |  |
| 3 |  |  | 1 | 3 | 1 | 3 |  | 1 | 2 |
|  | 3 |  |  |  |  |  |  |  |  |
| 4 |  | 4 |  |  |  | 2 |  |  | 3 |
|  |  |  |  | 1 |  |  | 3 |  |  |
|  |  |  |  |  |  |  |  |  |  |

Puzzle No. 20

## Slalom

Slalom is a puzzle originally from nikoli. The object is to draw a single closed loop through adjacent grid squares, with no square visited twice. The loop must pass straight through each gray line exactly once; if the line spans multiple cells only one of them should be crossed. The loop is considered to start from the circled number, which tells how many gray lines there are. If a gray line has a number written somewhere on it, that's when it should be crossed. For example, a gray line with a 1 (if there is one) should be crossed first starting from the circle. The solution is unique.


Puzzle No. 21

## Heyawacky

Author's Note : So dear friends, we're at the 21st puzzle. Now, I could only choose one type for this special number, and that is the first puzzle type I made. This, combining with the aesthetic of my first real quality construction, the numberless Heyawake. This one came out quite luckily well. However, I do think the logic for the only numbered room may go to some trial and error, so I will tell you to just start from the bottom left and go on shading in the room as close together as you can depending on the behaviour of the rest of the puzzle as you go along. You should be fine then. Hope you enjoyed the lot of these, and this one. That'll be all, for now ;) Puzzle's on the next page. The
funny thing is, I had created this and then turned it upside down for your solve. Big difference right : P
Rules: Heyawacky is a minor variation of the puzzle Heyawake originally from nikoli. The variation has been done before by motris, and the name "heyawacky" is also his idea although he didn't use it. The object is to shade in some of the grid squares. No two shaded squares should be adjacent, and all of the unshaded squares should be in one contiguous region - equivalently, any two unshaded squares should have a path joining them through adjacent unshaded squares. The grid is also partitioned into a number of rooms. Any room with a number must have exactly that many shaded squares. Finally, there is the "two boundaries" rule. There may never be a horizontal or vertical line of unshaded cells that crosses two room boundaries. This rule applies even if the line exits and reenters a room.

