

LMI

Aug 2010
Puzzle Test



LMI AUGUST PUZZLE TEST

"BRΘΞΠ PİËÇË\$"

28th-29th August, 2010

INSTRUCTION BOOKLET

(Puzzles by Tejal Phatak and Rohan Rao)

<http://rohanrao.blogspot.com/>

SUBMISSION: <http://logicmastersindia.com/M201008P>

FORUM: <http://www.logicmastersindia.com/forum/forums/thread-view.asp?tid=114>

INSTRUCTIONS

- Before the test starts, a password protected pdf file will be available to download. This will contain the test puzzles.
- After you start the test, the password will be shown to you. You can open the pdf using the password, solve on paper and enter the answer keys using the website.
- After you start the test, submission is allowed upto 100 minutes.
- Time bonus of 1 point per minute saved will be awarded only if all the puzzles are solved correctly.
- There wont be any provision to solve online. After solving on paper, you have to copy the answer keys and submit.
- A timer will be available for you on the test page.
- The submission page will warn you when you are trying to enter the answer keys in the wrong format. This is just a warning, and your submission will be accepted even if there are warnings.
- Every puzzle has 1 or 2 Answer Keys.
- You may submit as many times as you want. Only your last submission will be considered for scoring.
- Points are generally indicative of the difficulty of the puzzles and time required to solve it. However, personal experience and preference might differ.

POINTS TABLE

PUZZLE NO.	PUZZLE	POINTS
1	Black And White	10
2	Domino Hunt	12
3	Hitori	3
4	Irregular Sudoku	5
5	Loop Finder	6
6	Minesweeper	6
7	Samurai Sudoku	10 (2x5)
8	Scrabble Loop	13
9	Tapa	8
10	Tents	15
11	Train	7
12	Zigzag	5
	Total	100

PUZZLE INSTRUCTIONS

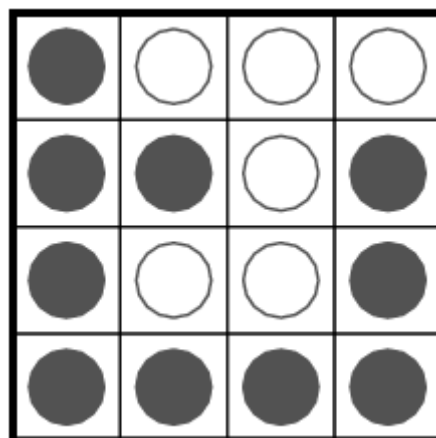
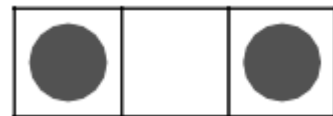
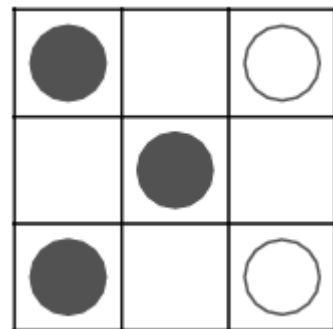
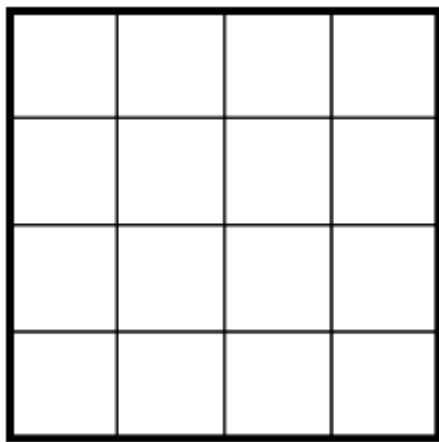
- In ALL the puzzles, the given pieces CANNOT BE ROTATED/REFLECTED/MIRRORED.
- The pieces CANNOT OVERLAP each other at all.
- Download the separate pdf for Samurai Sudoku.

☺ BLACK AND WHITE ☺

Fit the pieces in the grid and solve the puzzle. Fill each cell with either a white circle or a black circle such that there is a single connected group of white circles (horizontally and vertically) and a single connected group of black circles (horizontally and vertically).
No 2x2 region can contain all circles of the same colour.

No 2x2 region can contain all circles of the same colour.

ANSWER KEY 1: Enter number of white circles (6)



DOMINO HUNT

Fit the pieces in the blank regions and solve the puzzle. The grid contains a complete set of dominoes of the given range. Find the dominoes by drawing the edges.

ANSWER KEY 1: Enter number of horizontal dominoes (6)

3	1	3	2
2	0		
3	0	2	3
		2	1
0	1	0	1

3	1
---	---

0	2
---	---

0 0	1 1	2 2	3 3
0 1	1 2	2 3	
0 2	1 3		
0 3			

3	1	3	2
2	0	3	1
3	0	2	3
0	2	2	1
0	1	0	1

HITORI

Fit one of the pieces in the blank region and solve the puzzle. Paint out some cells such that there are no duplicate numbers in any row/column. Painted cells cannot share an edge. All unpainted cells must be connected horizontally or vertically in a single group.

ANSWER KEY 1: Enter number of shaded cells in top-left to bottom-right diagonal (1)

3	4	2	3
1			4
2			2
1	3	1	2

2	1
1	3

1	3
2	2

3	4	2	3
1	2	1	4
2	1	3	2
1	3	1	2

IRREGULAR SUDOKU

Fit the regions in the grid and solve the puzzle. Place numbers of the given range in the grid such that each row/column/region contains each number exactly once.

ANSWER KEY 1: Enter digits in top-left to bottom-right diagonal
(1331)

ANSWER KEY 2: Enter digits from top-right to bottom-left diagonal
(3113)

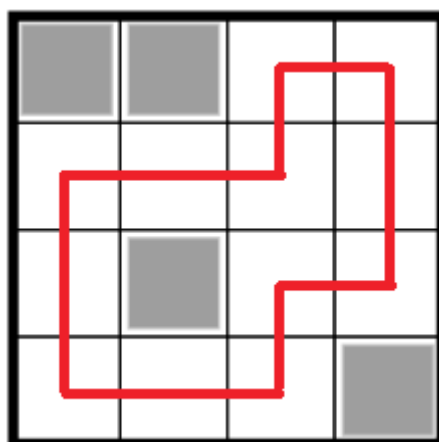
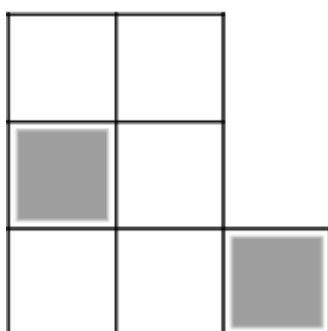
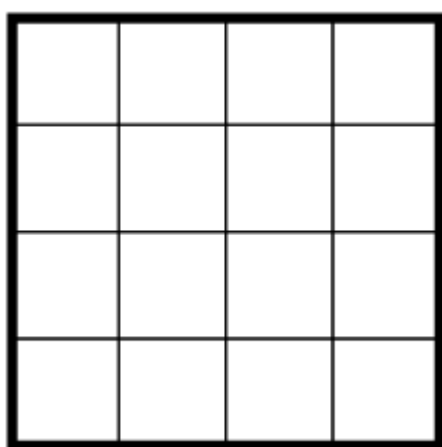
			3
		1	
4			
		2	

1	2	4	3
2	3	1	4
4	1	3	2
3	4	2	1

LOOP FINDER

Fit the pieces in the grid and solve the puzzle. The pieces may not use every cell. Draw a single continuous loop that visits all cells exactly once. The loop has only horizontal and vertical line segments. The loop cannot intersect/overlap itself. The loop does not pass through shaded cells.

ANSWER KEY 1: Enter number of turns made by loop (8)



• MINESWEEPER •

Fit one of the pieces in the shaded region and solve the puzzle. Place the given number of mines into empty cells in the grid such that the numbers in the grid represent the number of mines in the neighbouring cells.

ANSWER KEY 1: Enter number of mines in (2nd) row (1)
ANSWER KEY 2: Enter number of mines in (4th) column (3)

8 MINES









1			
	3		
2			2

4	

5	

	2
3	

3	
	2

1			
		5	
	3		
2			2

■ ■ SAMURAI SUDOKU ■ ■

Fit the pieces in the shaded regions and solve the puzzle. Place numbers 1 to 9 in the grid such that every row/column/3x3 box contains each number exactly once. The grid comprises of five Classic Sudokus with some common 3x3 boxes. The common 3x3 boxes should satisfy both the Sudokus it joins.

ANSWER KEY 1: Enter digits of 5th row of Sudoku A

ANSWER KEY 2: Enter digits of 5th row of Sudoku B

ANSWER KEY 3: Enter digits of 5th row of Sudoku C

ANSWER KEY 4: Enter digits of 5th row of Sudoku D

ANSWER KEY 5: Enter digits of 5th row of Sudoku E

REFER TO THE SAMURAI SUDOKU PDF FOR INSTRUCTIONS,
RULES, TIPS, EXAMPLE AND PIECES.

SCRABBLE LOOP

The given words form a closed loop in a game of Scrabble. Find the arrangement of the loop. All words must be a part of the loop. One word is given in the grid. The grid is large for your convenience.

ANSWER KEY 1: Enter number of letters in loop (10)
TEJAL, ROHAN, FRIENDS, FOREVER

						T	E	J	A	L				

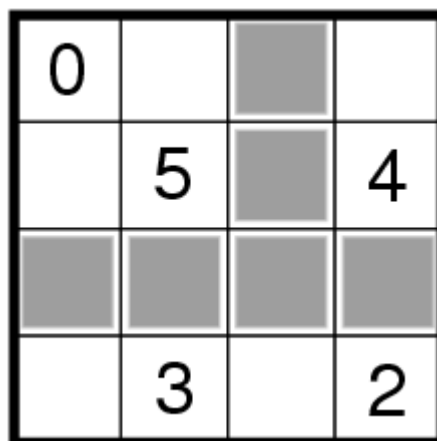
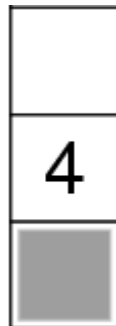
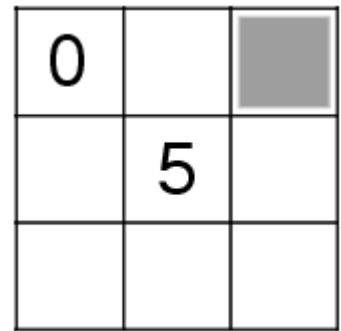
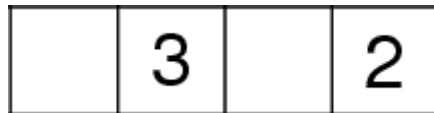
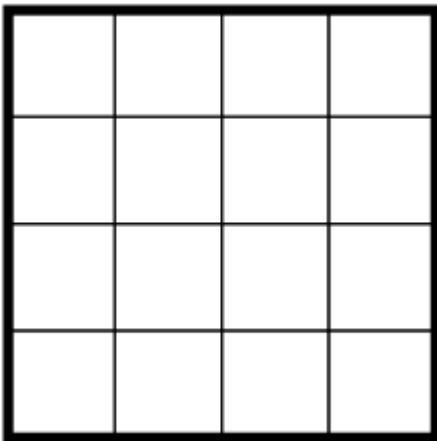
						F	O	R	E	V	E	R		
						R		O						
						I		H						
						T	E	J	A	L				
						N		N						
						D								
						S								

|| TAPA ||

Fit the pieces in the grid and solve the puzzle. Some pieces may have painted cells as a clue. Paint some empty cells such that the number(s) in a cell indicates the length of the painted cells on its neighbouring cells. If there is more than one number in a cell, there must be at least one blank cell between the painted cells. Painted cells cannot form a 2x2 region.

ANSWER KEY 1: Enter number of shaded cells in (3rd) row (4)

ANSWER KEY 2: Enter number of shaded cells in (3rd) column (3)



△ TENTS △

Fit the pieces in the grid and solve the puzzle. The pieces contain all the trees. Place one tent horizontally or vertically next to each tree.

Tents do not touch other, not even diagonally. The numbers outside the grid indicate the number of tents in the corresponding row/column.

ANSWER KEY 1: Enter number of tents horizontally attached to tree
(4)

ANSWER KEY 2: Enter number of tents in top-left to bottom-right
diagonal (0)

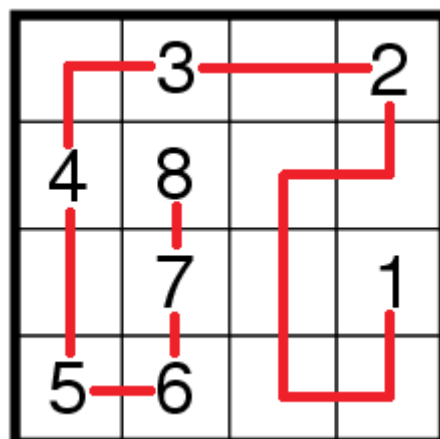
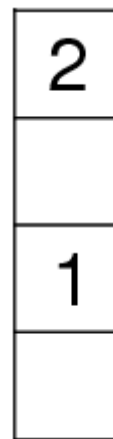
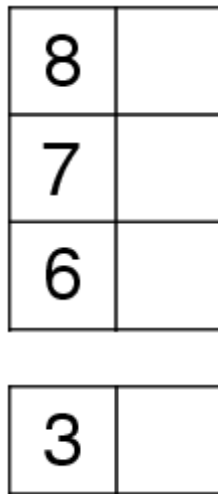
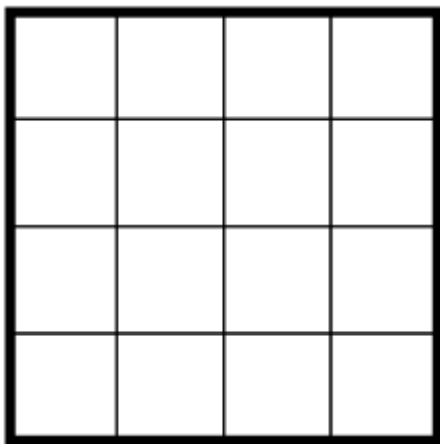
	2	0	1	1				
0								
2					T	T		
0								
2						T		T

	2	0	1	1				
0								
2	△	-T	T	-△				
0								
2	△	-T	△	-T				

■ ——— TRAIN ——— ■

Fit the pieces in the grid and solve the puzzle. The numbers in the grid indicate stations. A train starts from '1' and goes through '2', '3', etc. in order and stops at the last station. The train passes through all cells exactly once and does not cross/overlap itself.

ANSWER KEY 1: Enter number of turns made by train (8)



WWW ZIGZAG WWW

Fit one of the pieces in the blank region and solve the puzzle. Draw a line passing through all cells exactly once starting from the top-left cell and ending at the bottom-right cell. The line connects the centres of neighbouring cells. The letters must occur in the given order.

ANSWER KEY 1: Enter number of 90° turns made by loop (5)

G	M	E	A
A			M
M			M
E	G	A	E

G	A
G	E

G	G
A	E

A	E
G	G

GAME

G	M	E	A
A	G	G	M
M	A	E	M
E	G	A	E