junior
sudoku mahabharat

Episode – 4
18th – 24th April 2025

Neighbours & Converse
by
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Important Links

Submission Page : http://logicmastersindia.com/live?contest=JSM202504

Discussion Thread : http://logicmastersindia.com/t/?tid=4243

F. A. Q. : http://logicmastersindia.com/t/?tid=2773

Registration, if required : http://logicmastersindia.com/register.asp

About this Episode

This episode has 9 Sudokus with the following breakdown:

- 2* Classic Sudoku 6x6 and 1 Classic Sudoku 9x9
- 2* Quadruple Sudoku 6x6
- 1 each of Non Consecutive Sudoku 6x6 and Non Consecutive Sudoku 9x9
- 1 each of Anti-Knight Sudoku 6x6 and Anti-Knight Sudoku 9x9

How to participate?

- Understand the rules of different variants that will appear in this episode. This Instruction Booklet has rules for each of them.
- Update your date of birth in your LMI profile here: https://logicmastersindia.com/forum/profile/controlpanel.asp
- Any time on or after 18th Apr (but on or before 24th Apr), login at the submission page using your LMI user-id and password. Please check the submission page for exact timing.
- **If you plan to solve on paper:**
  a) Download the password protected Puzzle booklet (will be uploaded before the test starts). The Puzzle booklet contains the actual Puzzles to be solved. It is password protected, so you won't be able to open it.
  b) Click on "Start". At this time, password for pdf will be shown and timer will start. **The contest duration is 40 minutes.**
  c) The puzzle booklet can be downloaded, printed and solved on paper.
  d) We advise you to have a printer accessible with enough paper.
  e) You are allowed to use writing implements, eraser, blank paper (including commercial graph paper), ruler, scissors, and tape.
- **If you plan to solve on LMI's Penpa-Integrated Interface:**
  a) Click on this link and understand the instructions - https://logicmastersindia.com/live/faq-online-solving.asp
  b) It is noted on the link too, but we note it here as well to be clear – the participants must still input the answer keys in the boxes below the puzzle and submit them to receive credit as given below.
- Irregular solving help of any kind is not permitted. This includes but is not limited to: assistance of any kind from any other person; prepared notes, books, calculators, computers, or tools other than items explicitly permitted.
- Participants may use both paper solving and online solving, even interchangeably. Eventually our system will only count anything submitted in the submission boxes in either mode.

If you are participating at LMI for first time, it will be useful to check the F.A.Q. at http://logicmastersindia.com/t/?tid=2773.

About answer keys and Submission

- After solving the puzzle, you need to submit the puzzle using the answer keys.
- You may submit the answer keys anytime during the test duration.
- Answer keys are always to be entered from left to right or top to bottom
- Don't enter any separator unless specified in the answer key
- If one row and one column is marked, enter the row first and then the column
- If multiple rows are marked, enter from top to bottom for marked rows
- If multiple columns are marked, enter from left to right for marked columns

Points Table and Scoring

Points typically indicate difficulty of the Puzzles and time required to solve them. You will get full points if you enter the correct answer key. While the organizers have made best efforts to match them, **your personal experience and preference may differ.**

Classic Sudoku 6x6	2 , 2
Classic Sudoku 9x9	8
Quadruple Sudoku 6x6	4 , 9
Non Consecutive Sudoku 6x6 & 9x9	2, 13
Anti-Knight Sudoku 6x6 & 9x9	3 , 7

This test uses instant grading where a solver can submit any individual Puzzle and receive confirmation that the solution is correct or not. Each incorrect submission reduces the puzzle's potential score. The first, second, third, and fourth incorrect submissions reduce the potential score to 90%, 70%, 40%, and 0% respectively. A demonstration for this is shown below.

Original points

04 Araf	50 points	4A	Sum should be 10

Potential points after 1 incorrect submission

04 Araf	45 / 50	4A	1234

Potential points after 2 incorrect submissions

04 Araf	35 / 50	4A	23311

Potential points after 3 incorrect submissions

04 Araf	20 / 50	4A	1111111111

Potential points after 4 incorrect submissions

04 Araf	0 / 50	4A	541

Bonus and Ranking

If you submitted all Puzzles correctly, you can have bonus points 1 point per minute saved, computed up to seconds.

Ranking will be based on following rules in order:
1. Most total points
2. Earliest final submission time, up to seconds (ignoring incorrect submissions)

Credits
- **Hemant Malani** and **Prasanna Seshadri** for test solving the puzzles and providing invaluable feedback.
- The original creator **opt-pan** for penpa edit - https://opt-pan.github.io/penpa-edit/
- **Swaroop Guggilam** for his recent efforts in adding features to Penpa-edit - https://swaroopg92.github.io/penpa-edit/ and also working to integrate it with our contest engine.

About the Puzzle Booklet
The password protected Puzzle booklet will have 4 pages. This is relevant only for paper solvers.

1-2 Classic Sudoku 6x6

2 + 2 points

Place a digit from 1 to 6 into each empty cell in the grid so that each digit appears exactly once in each row, column and 2x3 outlined box.

Penpa for example:
https://tinyurl.com/2nvezsrr

3 Classic Sudoku 9x9

8 points

Place a digit from 1 to 9 into each empty cell in the grid so that each digit appears exactly once in each row, column and 3x3 outlined box.

Penpa for example:
https://tinyurl.com/333ntt48

4-5 Quadruple Sudoku 6x6

4 + 9 points

Place a digit from 1 to 6 into each empty cell in the grid so that each digit appears exactly once in each row, column and 2x3 outlined box.
The digits at the intersection of four cells must be present in those four cells at least as many times as it appears in the intersections.

Penpa for example:
https://tinyurl.com/y84uz7d6

6 Non Consecutive Sudoku 6x6

2 points

Place a digit from 1 to 6 in each empty cell so that each digit appears exactly once in each row, column and 2X3 box.

Digits in adjacent cells must not be consecutive.

Penpa for example:
https://tinyurl.com/9dsd2c4r
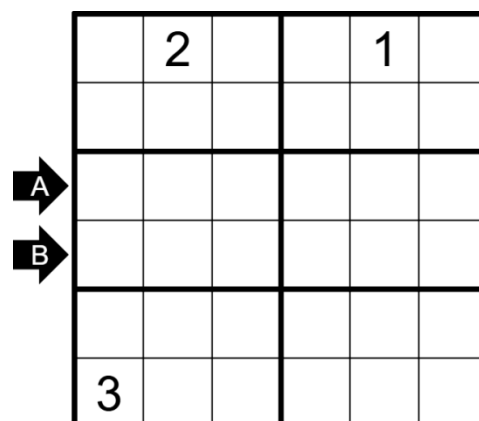
7 Non Consecutive 9x9

13 points

Place a digit from 1 to 9 in each empty cell so that each digit appears exactly once in each row, column and 3X3 box.

Digits in adjacent cells must not be consecutive.

Penpa for example:
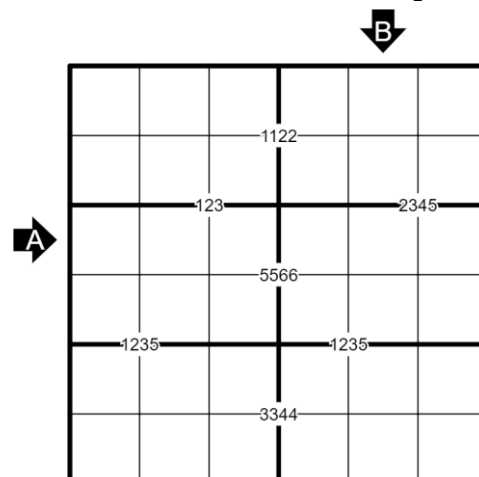https://tinyurl.com/2p88xkt2

8 Anti Knight Sudoku 6x6

3 points

Place a digit from 1 to 6 into each empty cell in the grid so that each digit appears exactly once in each row, column and 2x3 outlined box.
No cell that is a knight-step away can contain the same digit. A knight's move is 2 in a line and 1 to the side, as in chess.

Penpa for example:
https://tinyurl.com/y2uy3ajd

9 Anti Knight Sudoku 9x9

7 points

Place a digit from 1 to 9 into each empty cell in the grid so that each digit appears exactly once in each row, column and 3x3 outlined box.

No cell that is a knight-step away can contain the same digit. A knight's move is 2 in a line and 1 to the side, as in chess.

Penpa for example:
https://tinyurl.com/yxhdxclf

9				4		6		7
	8			3			4	
6								
			8		5			
1	5						7	8
			9		4			
								4
	9			6			1	
2		8		9				5

Solutions

Classic Sudoku 6x6

1	2	4	6	3	5
5	6	3	4	2	1
4	1	2	3	5	6
3	5	6	1	4	2
2	3	1	5	6	4
6	4	5	2	1	3

Key: 412356,325461

Classic Sudoku 9x9

4	1	2	6	7	3	9	8	5
8	3	7	9	1	5	4	6	2
6	9	5	4	8	2	1	3	7
2	5	9	8	3	1	7	4	6
7	8	1	5	6	4	3	2	9
3	4	6	2	9	7	5	1	8
9	7	3	1	2	6	8	5	4
1	2	4	7	5	8	6	9	3
5	6	8	3	4	9	2	7	1

Key: 781564329,718369254

Product 6x6

5	4	1	2	6	3
6	3	2	1	4	5
4	1	5	6	3	2
3	2	6	5	1	4
1	5	4	3	2	6
2	6	3	4	5	1

Key: 415632,643125

Non Consecutive Sudoku 6x6

4	2	6	3	1	5
1	5	3	6	4	2
5	3	1	4	2	6
2	6	4	1	5	3
6	4	2	5	3	1
3	1	5	2	6	4

Key: 531426,264153

Non Consecutive Sudoku 9x9

3	8	1	4	9	6	2	5	7
6	4	9	7	5	2	8	1	3
2	7	5	3	1	8	4	9	6
9	3	7	5	8	4	1	6	2
1	6	4	9	2	7	5	3	8
5	2	8	1	6	3	9	7	4
8	5	2	6	3	1	7	4	9
4	9	6	2	7	5	3	8	1
7	1	3	8	4	9	6	2	5

Key: 528163974,852631749

Anti Knight Sudoku 6x6

1	2	6	5	3	4
4	3	5	1	2	6
6	5	3	4	1	2
2	1	4	6	5	3
3	4	1	2	6	5
5	6	2	3	4	1

Key: 341265,146235

Anti Knight Sudoku 9x9

9	3	1	5	4	2	6	8	7
7	8	5	6	3	9	2	4	1
6	4	2	7	8	1	5	3	9
4	2	3	8	7	5	1	9	6
1	5	9	3	2	6	4	7	8
8	7	6	9	1	4	3	5	2
3	6	7	1	5	8	9	2	4
5	9	4	2	6	7	8	1	3
2	1	8	4	9	3	7	6	5

Key: 876914352,719682435