Indian Sudoku Championship 2011 Online Qualification Round 23-Apr-2011

http://logicmastersindia.com/ISC2011/onlineQ.asp

Timing

- 120 minutes
- Online round will start at 23-Apr-2011 14:00 IST
- To qualify for ISC finals, all submissions before 23-Apr-2011 16:30 IST will be considered. So if you are aiming to qualify for ISC finals, start online round accordingly
- The round will be open for 48 hours, and results will be used by LMI ratings and UKPA ratings

Points Table

	1	Odd Even Sudoku	18	
	2	Diagonal Sudoku	27	
	3	Extra Region Sudoku	32	
လ	4	Sudoku XV	34	D
VARIANTS	5	Consecutive Sudoku	36	Points are generally indicative of the difficulty
≤	6	Sudoku Trio	41	of the Sudoku and time required to solve it. However, your personal experience and
A R	7	Outside Sudoku	45	preference might differ.
>	8	Inequality Sudoku	53	profession might amore
	9	Irregular-Scattered Sudoku	59	
	10	Killer Sudoku	72	
	11	Product Frame Sudoku	75	
	12	Classic Sudoku 1	8	The point values of classic Sudokus are
	13	Classic Sudoku 2	10	much less than that of Variants. To get
	14	Classic Sudoku 3	12	maximum points, it is advisable to spend more time on variants.
	15	Classic Sudoku 4	34	Point Value = Approximate point you get
+	Bor	nus = number of Variants solve	ed *	for spending one minute on a Sudoku
_ '		number of Classics solved		
				Participants who solve all Sudokus within
١.	D	itian Danus — F nainte nan nac	:4:	the time period will get position bonus.
+	Pos	ition Bonus = 5 points per pos	ition	For example, if 10 players complete all Sudokus, the 1 st player will get 50 points,
				the 2 nd player will get 45 points, so on
	1			Tillo 2 player will get 40 politio, 30 off

Results

- Results will be published at LMI site on or before 26-Apr-2011 (Tuesday)
- External help of any kind is not allowed. LMI reserves the right to withhold results of participants, if we feel unfair means have been used to achieve the results.



How to participate

- Participants must be a registered member at http://logicmastersindia.com (LMI)
- Download the password protected Sudoku booklet (will be uploaded before round starts)
- Login at the submission page (http://logicmastersindia.com/ISC2011/onlineQ.asp) using your LMI userid and password (and fill the country)
- Click on "Start Online Round". At this time, password for pdf will be shown and timer will start.
- You can either solve online using flash interface or print the pdf and solve on paper.
- Each Sudoku will be marked with a row and a column
- If solving on paper
 - Fill the answer form with digits from marked row and column
 - o Click submit button (there is only 1 submit button for all Sudokus)
- If solving online
 - o After solving the Sudoku, click on "Submit" button below the grid
 - Each Sudoku grid has different submit buttons
- You can submit as many times as you want, your last submitted answer (using paper mode or online mode) will be used for results.

Classic Sudoku

Every digit from 1 through 9 has to appear exactly once in every row, every column, and every 3X3 box.

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

_					-				
	9	6	7	5	8	1	4	3	2
	4	1	2	3	6	7	8	9	5
	8	3	5	4	9	2	6	1	7
	3	7	9	8	2	5	1	4	6
\Rightarrow	1	8	4	6	7	9	2	5	3
	2	5	6	1	3	4	7	8	9
	6	2	3	9	1	8	5	7	4
	7	4	1	2	5	3	9	6	8
	5	9	8	7	4	6	3	2	1

The grid above shows how one row and one column will be marked. In this case, the answer key for the marked row is 184679253, the answer key for the marked column is 869273154

Sudoku Types

Apart from Classic Sudoku, several variations will appear in this round. The rules for each type are explained in remaining pages.



Sudoku XV

Apply classic Sudoku rules.

All horizontally and vertically neighbouring digits with the sum 10 are marked with X, all horizontally and vertically neighbouring digits with the sum 5 are marked with V.

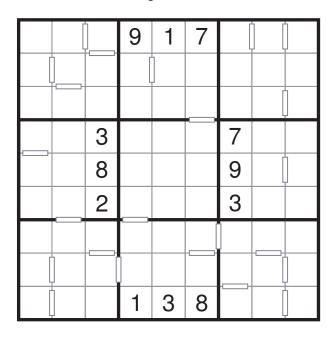
	/ 	/					– x –	
	- x -		– v –) - x -	1	- v -
	^			,		Γî⁻	7	$\lceil \ \rceil$
,	/ /		,	_ x _	— x —		9	
)	— х — { L)	(- x -		3	
		_ v _)	Χ 	_ ^ _	7 - x -	5	9
– x –)	((– x –	– v –

2 \	/ 3	9	6	8	1	5	4 - x -	7
7	1 \	4	3	9	5	2	ê	8
8	6 -×-	5	2	4	7	9 ×	(1	3
9	$\begin{bmatrix} \hat{4} \end{bmatrix}$	8	5	3 -x-	6 -×-		7	_ <u>`</u> 2
3 \	2	6	1 - x -	7	$\hat{4}$	8	9	5
5	7	1	ĝ	2 >	. 8 - × -	4	3	6
1	8	3	4 >	6	$\hat{2}$	7 - x -	5	9
6 - x -	5	2	7	1 >	9	Ŝ	8	4
4	9	7	8	5	3	6	_x- 2	1

Consecutive Sudoku

Apply classic Sudoku rules.

Neighboring cells which contain digits differing by 1 are separated by white bars. If there is no white bar between two cells, the digits can not be consecutive.



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



Diagonal Sudoku

Apply classic Sudoku rules.

Every digit from 1 through 9 has to appear exactly once across the marked diagonals.

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

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

Extra Region Sudoku

Apply classic Sudoku rules.

Each extra region must contain digits from 1-9. The extra regions are of 9 cells each and are shaded with different colors in the grid.

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

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



Inequality Sudoku

Apply classic Sudoku rules.

Digits must be placed according to the given inequality symbols (< or >).

	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	2	
2	>	8	1
	^	7	

7	9	5	3	2	4	1<	6<	8
6<	8	4	9	5	1	3) Ž <	7
3	1<	2	7	6	8	5<		4
5	4	9	2	1	7	6<	8	3
2	6	3	4 <	8	5	9	7	1
1	7<	8	6<	9	3	2<	4	5
4	2	1	8	3<	9	7	5	6
9	3<	7	5	4 <	6	8) <u>1</u>	2
8	5<	6	1<	7	2	4	3<	9

Irregular-Scattered Sudoku

Every digit from 1 through 9 has to appear exactly once in every row, every column, all boldly outlined shapes, and group of single grey cells.

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

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



Killer Sudoku

Apply classic Sudoku rules.

The number on the top left of each cage denotes the sum of the digits inside the cage. All digits inside a cage must be different.

21 11 5	13 10 77 1	26
12 23 23 20 20 20 20 20 20 20 20 20 20 20 20 20	17 22 6	6
16 16	9 9 9 19 19 19 19 19 19 19 19 19 19 19 1	7 - 15 - 15 - 1

219	7	l		1	¦¹6		1	; ²⁶ 4
5	⁵3	2	1		⁷ 4			7
16	4		¹⁶ 7	9	3	²¹ 2	5	8
⁶ 2	1	3	179	22/1	7:	225	β	่ค
7	5	236	8	3	61	9	⁶ 4	2
²⁰ 4	8	9	6	2	5	7	3	1
3	6	7	[°] 5	⁹ 1	8	¹⁵ 4	2	9
168	2	5	4	137	19	⁷ 1	6	153
1	169	4	3	6	2	8	7	5

Odd Even Sudoku

Apply classic Sudoku rules.

The greyed cells must contain even digits. The white cells must contain odd digits.

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

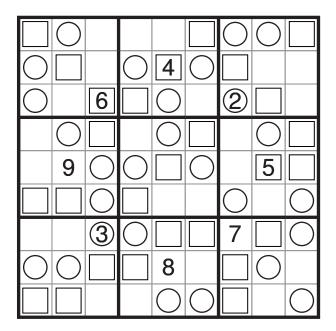
9	4	6	7	2	5	3	1	8
1	2	7	8	3	4	9	6	5
5	3	8	9	1	6	2	4	7
2	9	4	6	8	7	5	3	1
8	5	1	3	4	9	7	2	6
6	7	3	2	5	1	8	9	4
3	8	5	4	6	2	1	7	9
4	1	9	5	7	3	6	8	2
7	6	2	1	9	8	4	5	3



Sudoku Trio

Apply classic Sudoku rules.

Cells with circles must contain the digits 1, 2 and 3. Cells with squares must contain the digits 4, 5 and 6. Blank cells must contain the digits 7, 8 and 9.

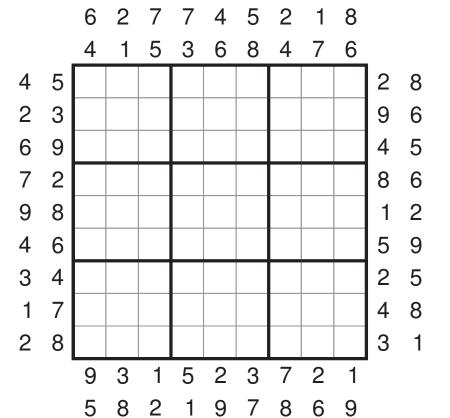


4	2	9	8	7	6	3	1	5
3	5	8	2	4	1	6	9	7
1	7	6	5	3	9	2	4	8
8	3	4	7	1	5	9	2	6
7	9	1	3	6	2	8	5	4
5	6	2	4	9	8	1	7	3
9	8	3	1	5	4	7	6	2
2	1	5	6	8	7	4	3	9
6	4	7	9	2	3	5	8	1

Outside Sudoku

Apply classic Sudoku rules.

The digits outside the grid must appear in one of the first three cells encountered from that edge of the grid

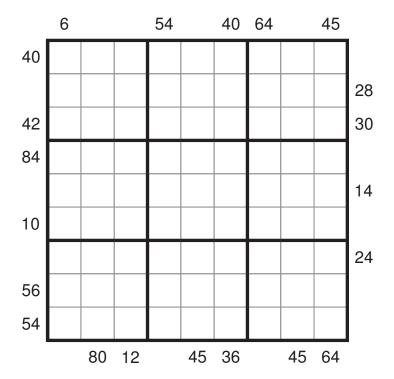


4	1	5	3	6	9	2	7	8
3	2	8	7	4	5	9	1	6
6	9	7	2	1	8	4	5	3
2	7	3	9	5	1	6	8	4
8	5	9	6	7	4	1	3	2
1	4	6	8	3	2	5	9	7
9	3	4	1	8	6	7	2	5
7	6	1	5	2	3	8	4	9
5	8	2	4	9	7	3	6	1

Product Frame Sudoku

Apply classic Sudoku rules.

Numbers outside the grid equal the product of the first three digits in the row or column in the corresponding direction.



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

