

Indian Sudoku Championship 2011 - Finals

11-Jun-2011, Bangalore

Round 3 – Neighbours

60 minutes

Name :
Contact :
<i>Submission Time :</i>

Sudoku	Points	Check1	Check2
Multiple Sudoku	60		
Sudoku XV	50		
Kropki Sudoku	40		
Equal Sum Sudoku	140		
Small Neighbours Sudoku	55		
Multiplication Table Sudoku	140		
Average Sudoku	115		
Total			

Multiple Sudoku

60 points

All orthogonally adjacent cells with “both digits being greater than 1” and “one being multiple of another” are marked.

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

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

Sudoku XV

50 points

All orthogonally adjacent cells with two digits summing to 5 are marked by V, while those summing to 10 are marked by X.

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

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

Kropki Sudoku

40 points

All orthogonally adjacent cells with absolute difference between two digits being 1 have a white dot between them. All orthogonally adjacent cells with one digit being double of another have a black dot between them. The dot between '1' and '2' can be of any color.

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

			7		5			
		7				9		
	8						2	
8								3
2								9
	3						9	
		2				7		
			8		7			

Equal Sum Sudoku

140 points

Every 2X2 region "where the sums of digits in the diagonally opposite cells are equal" is marked.

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

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

Small Neighbours

55 points

All cells where the digit is greater than all its orthogonal neighbours are shaded. Cells with digit 9 are never shaded.

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

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

Multiplication Table Sudoku

140 points

Every 2X2 region "where the product of digits in top row is equal to the 2-digit number (left-to-right) in the bottom row" is marked.

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

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

All cells where the digit is average of horizontally adjacent cells have a horizontal line. All cells where the digit is average of vertically adjacent cells have a vertical line.

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

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

Multiple Sudoku 60

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

Kropki Sudoku 40

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

Sudoku XV 50

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

Equal Sum Sudoku 140

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

Small Neighbours Sudoku 55

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

Average Sudoku 115

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

Multiplication Table Sudoku 140

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