

## Solve Hard Sudoku on Fri, 3/16/2018

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

### How to solve this Sudoku?

Tried the following methods: OneChoice, Row-Elimination, Column-Elimination, Box-Elimination, Subset2Row, Subset2Col, Subset2Box, SubsetPosition2Row, SubsetPosition2Col, SubsetPosition2Box, Interaction-RowBox, Interaction-ColBox, Interaction-BoxRow, Interaction-BoxCol, Subset3Row, Subset3Col, Subset3Box, SubsetPosition3Row, SubsetPosition3Col, SubsetPosition3Box, Subset4Row, Subset4Col, Subset4Box, SubsetPosition4Row, SubsetPosition4Col, SubsetPosition4Box, DoubleRowsOneDigitCheck(X-Wing), DoubleColsOneDigitCheck(X-Wing), TripleRowsOneDigitCheck, TripleColsOneDigitCheck, QuadrRowsOneDigitCheck, QuadrColsOneDigitCheck, XY-Wing-RowBox, XY-Wing-ColBox, XY-Wing-RowCol, XYZ-Wing-RowBox, XYZ-Wing-ColBox, ConflictElimination[1].

### Methods and the numbers of times they were used successfully:

OneChoice is used 37 times.

Row-Elimination is used 11 times.

Subset2Row is used once.

SubsetPosition2Row is used 2 times.

Interaction-RowBox is used 2 times.

Interaction-BoxRow is used once.

ConflictElimination is used 2 times.

**55 empty squares. All Numbers Are Inferred.**

Try OneChoice; Try Elimination;

[Step 1 of solving this Sudoku]- Use Row-Elimination for digit 9 at Row 8

12357	123678	25678	34579	257	234579	2789	1478	1245789
2357	237	9	6	8	1	27	47	2457
1257	4	2578	579	257	2579	3	178	6
8	67	67	357	4	357	1	2	79
27	9	3	178	1267	278	4	5	78
247	5	1	78	9	278	678	678	3
6	12378	4	1578	157	578	278	9	1278
179	178	78	2	3	6	5	1478	1478
123579	12378	2578	145789	157	45789	2678	134678	12478

## Update Candidate Values during [Step 1 of Solving this Sudoku]

12357	123678	25678	34579	257	234579	2789	1478	1245789
2357	237	9	6	8	1	27	47	2457
1257	4	2578	579	257	2579	3	178	6
8	67	67	357	4	357	1	2	79
27	9	3	178	1267	278	4	5	78
247	5	1	78	9	278	678	678	3
6	12378	4	1578	157	578	278	9	1278
9	178	78	2	3	6	5	1478	1478
12357	12378	2578	145789	157	45789	2678	134678	12478

Try OneChoice; Try Elimination;

[Step 2 of solving this Sudoku]- Use Row-Elimination for digit 4 at Row 6

12357	123678	25678	34579	257	234579	2789	1478	1245789
2357	237	9	6	8	1	27	47	2457
1257	4	2578	579	257	2579	3	178	6
8	67	67	357	4	357	1	2	79
27	9	3	178	1267	278	4	5	78
247	5	1	78	9	278	678	678	3
6	12378	4	1578	157	578	278	9	1278
9	178	78	2	3	6	5	1478	1478
12357	12378	2578	145789	157	45789	2678	134678	12478

## Update Candidate Values during [Step 2 of Solving this Sudoku]

12357	123678	25678	34579	257	234579	2789	1478	1245789
2357	237	9	6	8	1	27	47	2457
1257	4	2578	579	257	2579	3	178	6
8	67	67	357	4	357	1	2	79
27	9	3	178	1267	278	4	5	78
4	5	1	78	9	278	678	678	3
6	12378	4	1578	157	578	278	9	1278
9	178	78	2	3	6	5	1478	1478
12357	12378	2578	145789	157	45789	2678	134678	12478

Try OneChoice; Try Elimination;

[Step 3 of solving this Sudoku]- Use Row-Elimination for digit 2 at Row 6

12357	123678	25678	34579	257	234579	2789	1478	1245789
2357	237	9	6	8	1	27	47	2457
1257	4	2578	579	257	2579	3	178	6
8	67	67	357	4	357	1	2	79
27	9	3	178	1267	278	4	5	78
4	5	1	78	9	278	678	678	3
6	12378	4	1578	157	578	278	9	1278
9	178	78	2	3	6	5	1478	1478
12357	12378	2578	145789	157	45789	2678	134678	12478

## Update Candidate Values during [Step 3 of Solving this Sudoku]

12357	123678	25678	34579	257	34579	2789	1478	1245789
2357	237	9	6	8	1	27	47	2457
1257	4	2578	579	257	579	3	178	6
8	67	67	357	4	357	1	2	79
27	9	3	178	167	78	4	5	78
4	5	1	78	9	2	678	678	3
6	12378	4	1578	157	578	278	9	1278
9	178	78	2	3	6	5	1478	1478
12357	12378	2578	145789	157	45789	2678	134678	12478



Try OneChoice; Try Elimination;

[Step 4 of solving this Sudoku]- Use Row-Elimination for digit 9 at Row 4

12357	123678	25678	34579	257	34579	2789	1478	1245789
2357	237	9	6	8	1	27	47	2457
1257	4	2578	579	257	579	3	178	6
8	67	67	357	4	357	1	2	79
27	9	3	178	167	78	4	5	78
4	5	1	78	9	2	678	678	3
6	12378	4	1578	157	578	278	9	1278
9	178	78	2	3	6	5	1478	1478
12357	12378	2578	145789	157	45789	2678	134678	12478

## Update Candidate Values during [Step 4 of Solving this Sudoku]

12357	123678	25678	34579	257	34579	2789	1478	124578
2357	237	9	6	8	1	27	47	2457
1257	4	2578	579	257	579	3	178	6
8	67	67	357	4	357	1	2	9
27	9	3	178	167	78	4	5	78
4	5	1	78	9	2	678	678	3
6	12378	4	1578	157	578	278	9	1278
9	178	78	2	3	6	5	1478	1478
12357	12378	2578	145789	157	45789	2678	134678	12478

Try OneChoice; Try Elimination;

[Step 5 of solving this Sudoku]- Use Box-Elimination for digit 3 at Box 9

12357	123678	25678	34579	257	34579	2789	1478	124578
2357	237	9	6	8	1	27	47	2457
1257	4	2578	579	257	579	3	178	6
8	67	67	357	4	357	1	2	9
27	9	3	178	167	78	4	5	78
4	5	1	78	9	2	678	678	3
6	12378	4	1578	157	578	278	9	1278
9	178	78	2	3	6	5	1478	1478
12357	12378	2578	145789	157	45789	2678	134678	12478

## Update Candidate Values during [Step 5 of Solving this Sudoku]

12357	123678	25678	34579	257	34579	2789	1478	124578
2357	237	9	6	8	1	27	47	2457
1257	4	2578	579	257	579	3	178	6
8	67	67	357	4	357	1	2	9
27	9	3	178	167	78	4	5	78
4	5	1	78	9	2	678	678	3
6	12378	4	1578	157	578	278	9	1278
9	178	78	2	3	6	5	1478	1478
1257	1278	2578	145789	157	45789	2678	3	12478

Try OneChoice; Try Elimination;

[Step 6 of solving this Sudoku]- Use Box-Elimination for digit 6 at Box 9

12357	123678	25678	34579	257	34579	2789	1478	124578
2357	237	9	6	8	1	27	47	2457
1257	4	2578	579	257	579	3	178	6
8	67	67	357	4	357	1	2	9
27	9	3	178	167	78	4	5	78
4	5	1	78	9	2	678	678	3
6	12378	4	1578	157	578	278	9	1278
9	178	78	2	3	6	5	1478	1478
1257	1278	2578	145789	157	45789	2678	3	12478

## Update Candidate Values during [Step 6 of Solving this Sudoku]

12357	123678	25678	34579	257	34579	2789	1478	124578
2357	237	9	6	8	1	27	47	2457
1257	4	2578	579	257	579	3	178	6
8	67	67	357	4	357	1	2	9
27	9	3	178	167	78	4	5	78
4	5	1	78	9	2	78	678	3
6	12378	4	1578	157	578	278	9	1278
9	178	78	2	3	6	5	1478	1478
1257	1278	2578	145789	157	45789	6	3	12478

Try OneChoice; Try Elimination;

[Step 7 of solving this Sudoku]- Use Row-Elimination for digit 6 at Row 6

12357	123678	25678	34579	257	34579	2789	1478	124578
2357	237	9	6	8	1	27	47	2457
1257	4	2578	579	257	579	3	178	6
8	67	67	357	4	357	1	2	9
27	9	3	178	167	78	4	5	78
4	5	1	78	9	2	78	678	3
6	12378	4	1578	157	578	278	9	1278
9	178	78	2	3	6	5	1478	1478
1257	1278	2578	145789	157	45789	6	3	12478

## Update Candidate Values during [Step 7 of Solving this Sudoku]

12357	123678	25678	34579	257	34579	2789	1478	124578
2357	237	9	6	8	1	27	47	2457
1257	4	2578	579	257	579	3	178	6
8	67	67	357	4	357	1	2	9
27	9	3	178	167	78	4	5	78
4	5	1	78	9	2	78	6	3
6	12378	4	1578	157	578	278	9	1278
9	178	78	2	3	6	5	1478	1478
1257	1278	2578	145789	157	45789	6	3	12478



Try OneChoice; Try Elimination;

[Step 8 of solving this Sudoku]- Use Box-Elimination for digit 3 at Box 7

12357	123678	25678	34579	257	34579	2789	1478	124578
2357	237	9	6	8	1	27	47	2457
1257	4	2578	579	257	579	3	178	6
8	67	67	357	4	357	1	2	9
27	9	3	178	167	78	4	5	78
4	5	1	78	9	2	78	6	3
6	12378	4	1578	157	578	278	9	1278
9	178	78	2	3	6	5	1478	1478
1257	1278	2578	145789	157	45789	6	3	12478

## Update Candidate Values during [Step 8 of Solving this Sudoku]

12357	12678	25678	34579	257	34579	2789	1478	124578
2357	27	9	6	8	1	27	47	2457
1257	4	2578	579	257	579	3	178	6
8	67	67	357	4	357	1	2	9
27	9	3	178	167	78	4	5	78
4	5	1	78	9	2	78	6	3
6	3	4	1578	157	578	278	9	1278
9	178	78	2	3	6	5	1478	1478
1257	1278	2578	145789	157	45789	6	3	12478

Try OneChoice; Try Elimination;

[Step 9 of solving this Sudoku]- Use Box-Elimination for digit 6 at Box 5

12357	12678	25678	34579	257	34579	2789	1478	124578
2357	27	9	6	8	1	27	47	2457
1257	4	2578	579	257	579	3	178	6
8	67	67	357	4	357	1	2	9
27	9	3	178	167	78	4	5	78
4	5	1	78	9	2	78	6	3
6	3	4	1578	157	578	278	9	1278
9	178	78	2	3	6	5	1478	1478
1257	1278	2578	145789	157	45789	6	3	12478

## Update Candidate Values during [Step 9 of Solving this Sudoku]

12357	12678	25678	34579	257	34579	2789	1478	124578
2357	27	9	6	8	1	27	47	2457
1257	4	2578	579	257	579	3	178	6
8	67	67	357	4	357	1	2	9
27	9	3	178	6	78	4	5	78
4	5	1	78	9	2	78	6	3
6	3	4	1578	157	578	278	9	1278
9	178	78	2	3	6	5	1478	1478
1257	1278	2578	145789	157	45789	6	3	12478

Try OneChoice; Try Elimination;

[Step 10 of solving this Sudoku]- Use Row-Elimination for digit 3 at Row 2

12357	12678	25678	34579	257	34579	2789	1478	124578
2357	27	9	6	8	1	27	47	2457
1257	4	2578	579	257	579	3	178	6
8	67	67	357	4	357	1	2	9
27	9	3	178	6	78	4	5	78
4	5	1	78	9	2	78	6	3
6	3	4	1578	157	578	278	9	1278
9	178	78	2	3	6	5	1478	1478
1257	1278	2578	145789	157	45789	6	3	12478

## Update Candidate Values during [Step 10 of Solving this Sudoku]

1257	12678	25678	34579	257	34579	2789	1478	124578
<b>3</b>	27	9	6	8	1	27	47	2457
1257	4	2578	579	257	579	3	178	6
8	67	67	357	4	357	1	2	9
27	9	3	178	6	78	4	5	78
4	5	1	78	9	2	78	6	3
6	3	4	1578	157	578	278	9	1278
9	178	78	2	3	6	5	1478	1478
1257	1278	2578	145789	157	45789	6	3	12478

Try OneChoice; Try Elimination;

[Step 11 of solving this Sudoku]- Use Row-Elimination for digit 5 at Row 2

1257	12678	25678	34579	257	34579	2789	1478	124578
3	27	9	6	8	1	27	47	2457
1257	4	2578	579	257	579	3	178	6
8	67	67	357	4	357	1	2	9
27	9	3	178	6	78	4	5	78
4	5	1	78	9	2	78	6	3
6	3	4	1578	157	578	278	9	1278
9	178	78	2	3	6	5	1478	1478
1257	1278	2578	145789	157	45789	6	3	12478

## Update Candidate Values during [Step 11 of Solving this Sudoku]

1257	12678	25678	34579	257	34579	2789	1478	12478
3	27	9	6	8	1	27	47	5
1257	4	2578	579	257	579	3	178	6
8	67	67	357	4	357	1	2	9
27	9	3	178	6	78	4	5	78
4	5	1	78	9	2	78	6	3
6	3	4	1578	157	578	278	9	1278
9	178	78	2	3	6	5	1478	1478
1257	1278	2578	145789	157	45789	6	3	12478



Try OneChoice; Try Elimination;

[Step 12 of solving this Sudoku]- Use Row-Elimination for digit 4 at Row 2

1257	12678	25678	34579	257	34579	2789	1478	12478
3	27	9	6	8	1	27	47	5
1257	4	2578	579	257	579	3	178	6
8	67	67	357	4	357	1	2	9
27	9	3	178	6	78	4	5	78
4	5	1	78	9	2	78	6	3
6	3	4	1578	157	578	278	9	1278
9	178	78	2	3	6	5	1478	1478
1257	1278	2578	145789	157	45789	6	3	12478

## Update Candidate Values during [Step 12 of Solving this Sudoku]

1257	12678	25678	34579	257	34579	2789	178	1278
3	27	9	6	8	1	27	4	5
1257	4	2578	579	257	579	3	178	6
8	67	67	357	4	357	1	2	9
27	9	3	178	6	78	4	5	78
4	5	1	78	9	2	78	6	3
6	3	4	1578	157	578	278	9	1278
9	178	78	2	3	6	5	178	1478
1257	1278	2578	145789	157	45789	6	3	12478

Try OneChoice; Try Elimination;

[Step 13 of solving this Sudoku]- Use Row-Elimination for digit 4 at Row 8

1257	12678	25678	34579	257	34579	2789	178	1278
3	27	9	6	8	1	27	4	5
1257	4	2578	579	257	579	3	178	6
8	67	67	357	4	357	1	2	9
27	9	3	178	6	78	4	5	78
4	5	1	78	9	2	78	6	3
6	3	4	1578	157	578	278	9	1278
9	178	78	2	3	6	5	178	1478
1257	1278	2578	145789	157	45789	6	3	12478

## Update Candidate Values during [Step 13 of Solving this Sudoku]

1257	12678	25678	34579	257	34579	2789	178	1278
3	27	9	6	8	1	27	4	5
1257	4	2578	579	257	579	3	178	6
8	67	67	357	4	357	1	2	9
27	9	3	178	6	78	4	5	78
4	5	1	78	9	2	78	6	3
6	3	4	1578	157	578	278	9	1278
9	178	78	2	3	6	5	178	4
1257	1278	2578	145789	157	45789	6	3	1278

Try OneChoice; Try Elimination;

[Step 14 of solving this Sudoku]- Use Box-Elimination for digit 9 at Box 3

1257	12678	25678	34579	257	34579	2789	178	1278
3	27	9	6	8	1	27	4	5
1257	4	2578	579	257	579	3	178	6
8	67	67	357	4	357	1	2	9
27	9	3	178	6	78	4	5	78
4	5	1	78	9	2	78	6	3
6	3	4	1578	157	578	278	9	1278
9	178	78	2	3	6	5	178	4
1257	1278	2578	145789	157	45789	6	3	1278

## Update Candidate Values during [Step 14 of Solving this Sudoku]

1257	12678	25678	3457	257	3457	9	178	1278
3	27	9	6	8	1	27	4	5
1257	4	2578	579	257	579	3	178	6
8	67	67	357	4	357	1	2	9
27	9	3	178	6	78	4	5	78
4	5	1	78	9	2	78	6	3
6	3	4	1578	157	578	278	9	1278
9	178	78	2	3	6	5	178	4
1257	1278	2578	145789	157	45789	6	3	1278

Try OneChoice; Try Elimination;

[Step 15 of solving this Sudoku]- Use Box-Elimination for digit 1 at Box 5

1257	12678	25678	3457	257	3457	9	178	1278
3	27	9	6	8	1	27	4	5
1257	4	2578	579	257	579	3	178	6
8	67	67	357	4	357	1	2	9
27	9	3	178	6	78	4	5	78
4	5	1	78	9	2	78	6	3
6	3	4	1578	157	578	278	9	1278
9	178	78	2	3	6	5	178	4
1257	1278	2578	145789	157	45789	6	3	1278

## Update Candidate Values during [Step 15 of Solving this Sudoku]

1257	12678	25678	3457	257	3457	9	178	1278
3	27	9	6	8	1	27	4	5
1257	4	2578	579	257	579	3	178	6
8	67	67	357	4	357	1	2	9
27	9	3	1	6	78	4	5	78
4	5	1	78	9	2	78	6	3
6	3	4	578	157	578	278	9	1278
9	178	78	2	3	6	5	178	4
1257	1278	2578	45789	157	45789	6	3	1278



Try OneChoice; Try Elimination;

[Step 16 of solving this Sudoku]- Use Row-Elimination for digit 2 at Row 5

1257	12678	25678	3457	257	3457	9	178	1278
3	27	9	6	8	1	27	4	5
1257	4	2578	579	257	579	3	178	6
8	67	67	357	4	357	1	2	9
27	9	3	1	6	78	4	5	78
4	5	1	78	9	2	78	6	3
6	3	4	578	157	578	278	9	1278
9	178	78	2	3	6	5	178	4
1257	1278	2578	45789	157	45789	6	3	1278

## Update Candidate Values during [Step 16 of Solving this Sudoku]

157	12678	25678	3457	257	3457	9	178	1278
3	27	9	6	8	1	27	4	5
157	4	2578	579	257	579	3	178	6
8	67	67	357	4	357	1	2	9
2	9	3	1	6	78	4	5	78
4	5	1	78	9	2	78	6	3
6	3	4	578	157	578	278	9	1278
9	178	78	2	3	6	5	178	4
157	1278	2578	45789	157	45789	6	3	1278

Try OneChoice; Try Elimination; Try Subset2Row;

[Step 17 of solving this Sudoku]- Use Subset2Row on squares {R4C2,R4C3}, and update candidate digits of squares R4C4 R4C6

157	12678	25678	3457	257	3457	9	178	1278
3	27	9	6	8	1	27	4	5
157	4	2578	579	257	579	3	178	6
8	67	67	357	4	357	1	2	9
2	9	3	1	6	78	4	5	78
4	5	1	78	9	2	78	6	3
6	3	4	578	157	578	278	9	1278
9	178	78	2	3	6	5	178	4
157	1278	2578	45789	157	45789	6	3	1278

## Update Candidate Values during [Step 17 of Solving this Sudoku]

157	12678	25678	3457	257	3457	9	178	1278
3	27	9	6	8	1	27	4	5
157	4	2578	579	257	579	3	178	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	78	4	5	78
4	5	1	78	9	2	78	6	3
6	3	4	578	157	578	278	9	1278
9	178	78	2	3	6	5	178	4
157	1278	2578	45789	157	45789	6	3	1278

Try OneChoice; Try Elimination; Try Subset2Row; Try Subset2col; Try Subset2Box; Try SubsetPosition2row;  
**[Step 18 of solving this Sudoku]- Use SubsetPosition2Row of digits 3 4 at R1C4 R1C6, and update them.**

157	12678	25678	3457	257	3457	9	178	1278
3	27	9	6	8	1	27	4	5
157	4	2578	579	257	579	3	178	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	78	4	5	78
4	5	1	78	9	2	78	6	3
6	3	4	578	157	578	278	9	1278
9	178	78	2	3	6	5	178	4
157	1278	2578	45789	157	45789	6	3	1278

## Update Candidate Values during [Step 18 of Solving this Sudoku]

157	12678	25678	34	257	34	9	178	1278
3	27	9	6	8	1	27	4	5
157	4	2578	579	257	579	3	178	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	78	4	5	78
4	5	1	78	9	2	78	6	3
6	3	4	578	157	578	278	9	1278
9	178	78	2	3	6	5	178	4
157	1278	2578	45789	157	45789	6	3	1278

Try OneChoice; Try Elimination; Try Subset2Row; Try Subset2col; Try Subset2Box; Try SubsetPosition2row;  
**[Step 19 of solving this Sudoku]- Use SubsetPosition2Row of digits 4 9 at R9C4 R9C6, and update them.**

157	12678	25678	34	257	34	9	178	1278
3	27	9	6	8	1	27	4	5
157	4	2578	579	257	579	3	178	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	78	4	5	78
4	5	1	78	9	2	78	6	3
6	3	4	578	157	578	278	9	1278
9	178	78	2	3	6	5	178	4
157	1278	2578	45789	157	45789	6	3	1278

## Update Candidate Values during [Step 19 of Solving this Sudoku]

157	12678	25678	34	257	34	9	178	1278
3	27	9	6	8	1	27	4	5
157	4	2578	579	257	579	3	178	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	78	4	5	78
4	5	1	78	9	2	78	6	3
6	3	4	578	157	578	278	9	1278
9	178	78	2	3	6	5	178	4
157	1278	2578	49	157	49	6	3	1278



Try OneChoice; Try Elimination; Try Subset2Row; Try Subset2col; Try Subset2Box; Try SubsetPosition2row;  
 Try Subsetposition2col; Try SubsetPosition2Box; Try InteractionRowBox;

**[Step 20 of solving this Sudoku]- Use InteractionRowBox for digit 2 at row 7 , remove this digit from positions R9C9**

157	12678	25678	34	257	34	9	178	1278
3	27	9	6	8	1	27	4	5
157	4	2578	579	257	579	3	178	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	78	4	5	78
4	5	1	78	9	2	78	6	3
6	3	4	578	157	578	278	9	1278
9	178	78	2	3	6	5	178	4
157	1278	2578	49	157	49	6	3	1278

## Update Candidate Values during [Step 20 of Solving this Sudoku]

157	12678	25678	34	257	34	9	178	1278
3	27	9	6	8	1	27	4	5
157	4	2578	579	257	579	3	178	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	78	4	5	78
4	5	1	78	9	2	78	6	3
6	3	4	578	157	578	278	9	1278
9	178	78	2	3	6	5	178	4
157	1278	2578	49	157	49	6	3	178

Try OneChoice; Try Elimination; Try Subset2Row; Try Subset2col; Try Subset2Box; Try SubsetPosition2row;  
 Try Subsetposition2col; Try SubsetPosition2Box; Try InteractionRowBox;

**[Step 21 of solving this Sudoku]- Use InteractionRowBox for digit 5 at row 7 , remove this digit from positions R9C5**

157	12678	25678	34	257	34	9	178	1278
3	27	9	6	8	1	27	4	5
157	4	2578	579	257	579	3	178	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	78	4	5	78
4	5	1	78	9	2	78	6	3
6	3	4	578	157	578	278	9	1278
9	178	78	2	3	6	5	178	4
157	1278	2578	49	157	49	6	3	178

## Update Candidate Values during [Step 21 of Solving this Sudoku]

157	12678	25678	34	257	34	9	178	1278
3	27	9	6	8	1	27	4	5
157	4	2578	579	257	579	3	178	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	78	4	5	78
4	5	1	78	9	2	78	6	3
6	3	4	578	157	578	278	9	1278
9	178	78	2	3	6	5	178	4
157	1278	2578	49	17	49	6	3	178

Try OneChoice; Try Elimination; Try Subset2Row; Try Subset2col; Try Subset2Box; Try SubsetPosition2row;  
 Try Subsetposition2col; Try SubsetPosition2Box; Try InteractionRowBox; Try InteractionColBox; Try  
 InteractionBoxRow;

**[Step 22 of solving this Sudoku]- Use InteractionBoxRow for digit 8 at box 8 , remove  
 this digit from positions R7C7 R7C9**

157	12678	25678	34	257	34	9	178	1278
3	27	9	6	8	1	27	4	5
157	4	2578	579	257	579	3	178	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	78	4	5	78
4	5	1	78	9	2	78	6	3
6	3	4	578	157	578	278	9	1278
9	178	78	2	3	6	5	178	4
157	1278	2578	49	17	49	6	3	178

## Update Candidate Values during [Step 22 of Solving this Sudoku]

157	12678	25678	34	257	34	9	178	1278
3	27	9	6	8	1	27	4	5
157	4	2578	579	257	579	3	178	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	78	4	5	78
4	5	1	78	9	2	78	6	3
6	3	4	578	157	578	27	9	127
9	178	78	2	3	6	5	178	4
157	1278	2578	49	17	49	6	3	178

Try OneChoice; Try Elimination;

[Step 23 of solving this Sudoku]- Use Column-Elimination for digit 8 at Column 7

157	12678	25678	34	257	34	9	178	1278
3	27	9	6	8	1	27	4	5
157	4	2578	579	257	579	3	178	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	78	4	5	78
4	5	1	78	9	2	78	6	3
6	3	4	578	157	578	27	9	127
9	178	78	2	3	6	5	178	4
157	1278	2578	49	17	49	6	3	178

## Update Candidate Values during [Step 23 of Solving this Sudoku]

157	12678	25678	34	257	34	9	178	1278
3	27	9	6	8	1	27	4	5
157	4	2578	579	257	579	3	178	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	78	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	578	157	578	27	9	127
9	178	78	2	3	6	5	178	4
157	1278	2578	49	17	49	6	3	178



Try OneChoice;

[Step 24 of Solving this Sudoku] - Use OneChoice for square R5C9

157	12678	25678	34	257	34	9	178	1278
3	27	9	6	8	1	27	4	5
157	4	2578	579	257	579	3	178	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	78	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	578	157	578	27	9	127
9	178	78	2	3	6	5	178	4
157	1278	2578	49	17	49	6	3	178

## Update Candidate Values during [Step 24 of Solving this Sudoku]

157	12678	25678	34	257	34	9	178	128
3	27	9	6	8	1	27	4	5
157	4	2578	579	257	579	3	178	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	578	157	578	27	9	12
9	178	78	2	3	6	5	178	4
157	1278	2578	49	17	49	6	3	18

Try OneChoice;

[Step 25 of Solving this Sudoku] - Use OneChoice for square R5C6

157	12678	25678	34	257	34	9	178	128
3	27	9	6	8	1	27	4	5
157	4	2578	579	257	579	3	178	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	578	157	578	27	9	12
9	178	78	2	3	6	5	178	4
157	1278	2578	49	17	49	6	3	18

## Update Candidate Values during [Step 25 of Solving this Sudoku]

157	12678	25678	34	257	34	9	178	128
3	27	9	6	8	1	27	4	5
157	4	2578	579	257	579	3	178	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	578	157	57	27	9	12
9	178	78	2	3	6	5	178	4
157	1278	2578	49	17	49	6	3	18

Try OneChoice;

[Step 26 of Solving this Sudoku] - Use OneChoice for square R6C4

157	12678	25678	34	257	34	9	178	128
3	27	9	6	8	1	27	4	5
157	4	2578	579	257	579	3	178	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	578	157	57	27	9	12
9	178	78	2	3	6	5	178	4
157	1278	2578	49	17	49	6	3	18

## Update Candidate Values during [Step 26 of Solving this Sudoku]

157	12678	25678	34	257	34	9	178	128
3	27	9	6	8	1	27	4	5
157	4	2578	59	257	579	3	178	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	58	157	57	27	9	12
9	178	78	2	3	6	5	178	4
157	1278	2578	49	17	49	6	3	18

Try OneChoice; Try Elimination;

[Step 27 of solving this Sudoku]- Use Row-Elimination for digit 8 at Row 7

157	12678	25678	34	257	34	9	178	128
3	27	9	6	8	1	27	4	5
157	4	2578	59	257	579	3	178	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	58	157	57	27	9	12
9	178	78	2	3	6	5	178	4
157	1278	2578	49	17	49	6	3	18

## Update Candidate Values during [Step 27 of Solving this Sudoku]

157	12678	25678	34	257	34	9	178	128
3	27	9	6	8	1	27	4	5
157	4	2578	59	257	579	3	178	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	157	57	27	9	12
9	178	78	2	3	6	5	178	4
157	1278	2578	49	17	49	6	3	18



Try OneChoice; Try Elimination; Try Subset2Row; Try Subset2col; Try Subset2Box; Try SubsetPosition2row; Try Subsetposition2col; Try SubsetPosition2Box; Try InteractionRowBox; Try InteractionColBox; Try InteractionBoxRow; Try InteractionBoxCol Try Subset3Row; Try Subset3Col; Try Subset3Box; Try Subsetposition3row; Try Subsetposition3col; Try SubsetPosition3Box; Try Subset4Row; Try Subset4Col; Try Subset4Box; Try SubsetPosition4Row; Try SubsetPosition4Col; Try SubsetPosition4Box; Try X-Wing(DoubleRowsOneDigitCheck); Try X-Wing(DoubleColsOneDigitCheck); Try TripleRowsOneDigitCheck; Try TripleColsOneDigitCheck; Try QuadrRowsOneDigitCheck; Try QuadrColsOneDigitCheck; Try XY-Wing(xywingRowBox); Try XY-Wing(xywingColBox); Try XY-Wing(xywingRowCol); Try XYZ-Wing(xyzwingRowBox); Try XYZ-Wing(xyzwingRowBox); Try ConflictElimination;

**[Step 28 of Solving Sudoku]- Use ConflictElimination for square R1C1 with digit 1.**

**There is a conflict. So we can remove digit 1 from R1C1**

157	12678	25678	34	257	34	9	178	128
3	27	9	6	8	1	27	4	5
157	4	2578	59	257	579	3	178	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	157	57	27	9	12
9	178	78	2	3	6	5	178	4
157	1278	2578	49	17	49	6	3	18

## Update Candidate Values during [Step 28 of Solving this Sudoku]

57	12678	25678	34	257	34	9	178	128
3	27	9	6	8	1	27	4	5
157	4	2578	59	257	579	3	178	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	157	57	27	9	12
9	178	78	2	3	6	5	178	4
157	1278	2578	49	17	49	6	3	18

Try OneChoice; Try Elimination; Try Subset2Row; Try Subset2col; Try Subset2Box; Try SubsetPosition2row; Try Subsetposition2col; Try SubsetPosition2Box; Try InteractionRowBox; Try InteractionColBox; Try InteractionBoxRow; Try InteractionBoxCol Try Subset3Row; Try Subset3Col; Try Subset3Box; Try Subsetposition3row; Try Subsetposition3col; Try SubsetPosition3Box; Try Subset4Row; Try Subset4Col; Try Subset4Box; Try SubsetPosition4Row; Try SubsetPosition4Col; Try SubsetPosition4Box; Try X-Wing(DoubleRowsOneDigitCheck); Try X-Wing(DoubleColsOneDigitCheck); Try TripleRowsOneDigitCheck; Try TripleColsOneDigitCheck; Try QuadrRowsOneDigitCheck; Try QuadrColsOneDigitCheck; Try XY-Wing(xywingRowBox); Try XY-Wing(xywingColBox); Try XY-Wing(xywingRowCol); Try XYZ-Wing(xyzwingRowBox); Try XYZ-Wing(xyzwingRowBox); Try ConflictElimination;

**[Step 29 of Solving Sudoku]- Use ConflictElimination for square R1C1 with digit 5.**

**There is a conflict. So we can remove digit 5 from R1C1**

57	12678	25678	34	257	34	9	178	128
3	27	9	6	8	1	27	4	5
157	4	2578	59	257	579	3	178	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	157	57	27	9	12
9	178	78	2	3	6	5	178	4
157	1278	2578	49	17	49	6	3	18

## Update Candidate Values during [Step 29 of Solving this Sudoku]

7	12678	25678	34	257	34	9	178	128
3	27	9	6	8	1	27	4	5
157	4	2578	59	257	579	3	178	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	157	57	27	9	12
9	178	78	2	3	6	5	178	4
157	1278	2578	49	17	49	6	3	18

Try OneChoice;

[Step 30 of Solving this Sudoku] - Use OneChoice for square R1C1

7	12678	25678	34	257	34	9	178	128
3	27	9	6	8	1	27	4	5
157	4	2578	59	257	579	3	178	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	157	57	27	9	12
9	178	78	2	3	6	5	178	4
157	1278	2578	49	17	49	6	3	18

## Update Candidate Values during [Step 30 of Solving this Sudoku]

7	1268	2568	34	25	34	9	18	128
3	2	9	6	8	1	27	4	5
15	4	258	59	257	579	3	178	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	157	57	27	9	12
9	178	78	2	3	6	5	178	4
15	1278	2578	49	17	49	6	3	18

Try OneChoice;

[Step 31 of Solving this Sudoku] - Use OneChoice for square R2C2

7	1268	2568	34	25	34	9	18	128
3	2	9	6	8	1	27	4	5
15	4	258	59	257	579	3	178	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	157	57	27	9	12
9	178	78	2	3	6	5	178	4
15	1278	2578	49	17	49	6	3	18

## Update Candidate Values during [Step 31 of Solving this Sudoku]

7	168	568	34	25	34	9	18	128
3	2	9	6	8	1	7	4	5
15	4	58	59	257	579	3	178	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	157	57	27	9	12
9	178	78	2	3	6	5	178	4
15	178	2578	49	17	49	6	3	18



Try OneChoice;

[Step 32 of Solving this Sudoku] - Use OneChoice for square R2C7

7	168	568	34	25	34	9	18	128
3	2	9	6	8	1	7	4	5
15	4	58	59	257	579	3	178	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	157	57	27	9	12
9	178	78	2	3	6	5	178	4
15	178	2578	49	17	49	6	3	18

## Update Candidate Values during [Step 32 of Solving this Sudoku]

7	168	568	34	25	34	9	18	128
3	2	9	6	8	1	7	4	5
15	4	58	59	257	579	3	18	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	157	57	2	9	12
9	178	78	2	3	6	5	178	4
15	178	2578	49	17	49	6	3	18

Try OneChoice;

[Step 33 of Solving this Sudoku] - Use OneChoice for square R7C7

7	168	568	34	25	34	9	18	128
3	2	9	6	8	1	7	4	5
15	4	58	59	257	579	3	18	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	157	57	2	9	12
9	178	78	2	3	6	5	178	4
15	178	2578	49	17	49	6	3	18

## Update Candidate Values during [Step 33 of Solving this Sudoku]

7	168	568	34	25	34	9	18	128
3	2	9	6	8	1	7	4	5
15	4	58	59	257	579	3	18	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	157	57	2	9	1
9	178	78	2	3	6	5	178	4
15	178	2578	49	17	49	6	3	18

Try OneChoice;

[Step 34 of Solving this Sudoku] - Use OneChoice for square R7C9

7	168	568	34	25	34	9	18	128
3	2	9	6	8	1	7	4	5
15	4	58	59	257	579	3	18	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	157	57	2	9	1
9	178	78	2	3	6	5	178	4
15	178	2578	49	17	49	6	3	18

## Update Candidate Values during [Step 34 of Solving this Sudoku]

7	168	568	34	25	34	9	18	28
3	2	9	6	8	1	7	4	5
15	4	58	59	257	579	3	18	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	57	57	2	9	1
9	178	78	2	3	6	5	78	4
15	178	2578	49	17	49	6	3	8

Try OneChoice;

[Step 35 of Solving this Sudoku] - Use OneChoice for square R9C9

7	168	568	34	25	34	9	18	28
3	2	9	6	8	1	7	4	5
15	4	58	59	257	579	3	18	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	57	57	2	9	1
9	178	78	2	3	6	5	78	4
15	178	2578	49	17	49	6	3	8

## Update Candidate Values during [Step 35 of Solving this Sudoku]

7	168	568	34	25	34	9	18	2
3	2	9	6	8	1	7	4	5
15	4	58	59	257	579	3	18	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	57	57	2	9	1
9	178	78	2	3	6	5	7	4
15	17	257	49	17	49	6	3	8



Try OneChoice;

[Step 36 of Solving this Sudoku] - Use OneChoice for square R1C9

7	168	568	34	25	34	9	18	2
3	2	9	6	8	1	7	4	5
15	4	58	59	257	579	3	18	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	57	57	2	9	1
9	178	78	2	3	6	5	7	4
15	17	257	49	17	49	6	3	8

## Update Candidate Values during [Step 36 of Solving this Sudoku]

7	168	568	34	5	34	9	18	2
3	2	9	6	8	1	7	4	5
15	4	58	59	257	579	3	18	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	57	57	2	9	1
9	178	78	2	3	6	5	7	4
15	17	257	49	17	49	6	3	8

Try OneChoice;

[Step 37 of Solving this Sudoku] - Use OneChoice for square R1C5

7	168	568	34	5	34	9	18	2
3	2	9	6	8	1	7	4	5
15	4	58	59	257	579	3	18	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	57	57	2	9	1
9	178	78	2	3	6	5	7	4
15	17	257	49	17	49	6	3	8

## Update Candidate Values during [Step 37 of Solving this Sudoku]

7	168	68	34	5	34	9	18	2
3	2	9	6	8	1	7	4	5
15	4	58	9	27	79	3	18	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	7	57	2	9	1
9	178	78	2	3	6	5	7	4
15	17	257	49	17	49	6	3	8

Try OneChoice;

[Step 38 of Solving this Sudoku] - Use OneChoice for square R3C4

7	168	68	34	5	34	9	18	2
3	2	9	6	8	1	7	4	5
15	4	58	9	27	79	3	18	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	7	57	2	9	1
9	178	78	2	3	6	5	7	4
15	17	257	49	17	49	6	3	8

## Update Candidate Values during [Step 38 of Solving this Sudoku]

7	168	68	34	5	34	9	18	2
3	2	9	6	8	1	7	4	5
15	4	58	9	27	7	3	18	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	7	57	2	9	1
9	178	78	2	3	6	5	7	4
15	17	257	4	17	49	6	3	8

Try OneChoice;

[Step 39 of Solving this Sudoku] - Use OneChoice for square R3C6

7	168	68	34	5	34	9	18	2
3	2	9	6	8	1	7	4	5
15	4	58	9	27	7	3	18	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	7	57	2	9	1
9	178	78	2	3	6	5	7	4
15	17	257	4	17	49	6	3	8

## Update Candidate Values during [Step 39 of Solving this Sudoku]

7	168	68	34	5	34	9	18	2
3	2	9	6	8	1	7	4	5
15	4	58	9	2	7	3	18	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	7	5	2	9	1
9	178	78	2	3	6	5	7	4
15	17	257	4	17	49	6	3	8



Try OneChoice;

[Step 40 of Solving this Sudoku] - Use OneChoice for square R3C5

7	168	68	34	5	34	9	18	2
3	2	9	6	8	1	7	4	5
15	4	58	9	2	7	3	18	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	7	5	2	9	1
9	178	78	2	3	6	5	7	4
15	17	257	4	17	49	6	3	8

## Update Candidate Values during [Step 40 of Solving this Sudoku]

7	168	68	34	5	34	9	18	2
3	2	9	6	8	1	7	4	5
15	4	58	9	2	7	3	18	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	7	5	2	9	1
9	178	78	2	3	6	5	7	4
15	17	257	4	17	49	6	3	8

Try OneChoice;

[Step 41 of Solving this Sudoku] - Use OneChoice for square R7C5

7	168	68	34	5	34	9	18	2
3	2	9	6	8	1	7	4	5
15	4	58	9	2	7	3	18	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	7	5	2	9	1
9	178	78	2	3	6	5	7	4
15	17	257	4	17	49	6	3	8

## Update Candidate Values during [Step 41 of Solving this Sudoku]

7	168	68	34	5	34	9	18	2
3	2	9	6	8	1	7	4	5
15	4	58	9	2	7	3	18	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	7	5	2	9	1
9	178	78	2	3	6	5	7	4
15	17	257	4	1	49	6	3	8

Try OneChoice;

[Step 42 of Solving this Sudoku] - Use OneChoice for square R7C6

7	168	68	34	5	34	9	18	2
3	2	9	6	8	1	7	4	5
15	4	58	9	2	7	3	18	6
8	67	67	35	4	35	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	7	5	2	9	1
9	178	78	2	3	6	5	7	4
15	17	257	4	1	49	6	3	8

## Update Candidate Values during [Step 42 of Solving this Sudoku]

7	168	68	34	5	34	9	18	2
3	2	9	6	8	1	7	4	5
15	4	58	9	2	7	3	18	6
8	67	67	35	4	3	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	7	5	2	9	1
9	178	78	2	3	6	5	7	4
15	17	257	4	1	49	6	3	8

Try OneChoice;

[Step 43 of Solving this Sudoku] - Use OneChoice for square R4C6

7	168	68	34	5	34	9	18	2
3	2	9	6	8	1	7	4	5
15	4	58	9	2	7	3	18	6
8	67	67	35	4	3	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	7	5	2	9	1
9	178	78	2	3	6	5	7	4
15	17	257	4	1	49	6	3	8

## Update Candidate Values during [Step 43 of Solving this Sudoku]

7	168	68	34	5	4	9	18	2
3	2	9	6	8	1	7	4	5
15	4	58	9	2	7	3	18	6
8	67	67	5	4	3	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	7	5	2	9	1
9	178	78	2	3	6	5	7	4
15	17	257	4	1	49	6	3	8



Try OneChoice;

[Step 44 of Solving this Sudoku] - Use OneChoice for square R1C6

7	168	68	34	5	4	9	18	2
3	2	9	6	8	1	7	4	5
15	4	58	9	2	7	3	18	6
8	67	67	5	4	3	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	7	5	2	9	1
9	178	78	2	3	6	5	7	4
15	17	257	4	1	49	6	3	8

## Update Candidate Values during [Step 44 of Solving this Sudoku]

7	168	68	3	5	4	9	18	2
3	2	9	6	8	1	7	4	5
15	4	58	9	2	7	3	18	6
8	67	67	5	4	3	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	7	5	2	9	1
9	178	78	2	3	6	5	7	4
15	17	257	4	1	9	6	3	8

Try OneChoice;

[Step 45 of Solving this Sudoku] - Use OneChoice for square R1C4

7	168	68	3	5	4	9	18	2
3	2	9	6	8	1	7	4	5
15	4	58	9	2	7	3	18	6
8	67	67	5	4	3	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	7	5	2	9	1
9	178	78	2	3	6	5	7	4
15	17	257	4	1	9	6	3	8

## Update Candidate Values during [Step 45 of Solving this Sudoku]

7	168	68	3	5	4	9	18	2
3	2	9	6	8	1	7	4	5
15	4	58	9	2	7	3	18	6
8	67	67	5	4	3	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	7	5	2	9	1
9	178	78	2	3	6	5	7	4
15	17	257	4	1	9	6	3	8

Try OneChoice;

[Step 46 of Solving this Sudoku] - Use OneChoice for square R4C4

7	168	68	3	5	4	9	18	2
3	2	9	6	8	1	7	4	5
15	4	58	9	2	7	3	18	6
8	67	67	5	4	3	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	7	5	2	9	1
9	178	78	2	3	6	5	7	4
15	17	257	4	1	9	6	3	8

## Update Candidate Values during [Step 46 of Solving this Sudoku]

7	168	68	3	5	4	9	18	2
3	2	9	6	8	1	7	4	5
15	4	58	9	2	7	3	18	6
8	67	67	5	4	3	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	7	5	2	9	1
9	178	78	2	3	6	5	7	4
15	17	257	4	1	9	6	3	8

Try OneChoice;

[Step 47 of Solving this Sudoku] - Use OneChoice for square R8C8

7	168	68	3	5	4	9	18	2
3	2	9	6	8	1	7	4	5
15	4	58	9	2	7	3	18	6
8	67	67	5	4	3	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	7	5	2	9	1
9	178	78	2	3	6	5	7	4
15	17	257	4	1	9	6	3	8

## Update Candidate Values during [Step 47 of Solving this Sudoku]

7	168	68	3	5	4	9	18	2
3	2	9	6	8	1	7	4	5
15	4	58	9	2	7	3	18	6
8	67	67	5	4	3	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	7	5	2	9	1
9	18	8	2	3	6	5	7	4
15	17	257	4	1	9	6	3	8



Try OneChoice;

[Step 48 of Solving this Sudoku] - Use OneChoice for square R8C3

7	168	68	3	5	4	9	18	2
3	2	9	6	8	1	7	4	5
15	4	58	9	2	7	3	18	6
8	67	67	5	4	3	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	7	5	2	9	1
9	18	8	2	3	6	5	7	4
15	17	257	4	1	9	6	3	8

## Update Candidate Values during [Step 48 of Solving this Sudoku]

7	168	6	3	5	4	9	18	2
3	2	9	6	8	1	7	4	5
15	4	5	9	2	7	3	18	6
8	67	67	5	4	3	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	7	5	2	9	1
9	1	8	2	3	6	5	7	4
15	17	257	4	1	9	6	3	8

Try OneChoice;

[Step 49 of Solving this Sudoku] - Use OneChoice for square R1C3

7	168	6	3	5	4	9	18	2
3	2	9	6	8	1	7	4	5
15	4	5	9	2	7	3	18	6
8	67	67	5	4	3	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	7	5	2	9	1
9	1	8	2	3	6	5	7	4
15	17	257	4	1	9	6	3	8

## Update Candidate Values during [Step 49 of Solving this Sudoku]

7	18	6	3	5	4	9	18	2
3	2	9	6	8	1	7	4	5
15	4	5	9	2	7	3	18	6
8	67	7	5	4	3	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	7	5	2	9	1
9	1	8	2	3	6	5	7	4
15	17	257	4	1	9	6	3	8

Try OneChoice;

[Step 50 of Solving this Sudoku] - Use OneChoice for square R3C3

7	18	6	3	5	4	9	18	2
3	2	9	6	8	1	7	4	5
15	4	5	9	2	7	3	18	6
8	67	7	5	4	3	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	7	5	2	9	1
9	1	8	2	3	6	5	7	4
15	17	257	4	1	9	6	3	8

## Update Candidate Values during [Step 50 of Solving this Sudoku]

7	18	6	3	5	4	9	18	2
3	2	9	6	8	1	7	4	5
1	4	5	9	2	7	3	18	6
8	67	7	5	4	3	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	7	5	2	9	1
9	1	8	2	3	6	5	7	4
15	17	27	4	1	9	6	3	8

Try OneChoice;

[Step 51 of Solving this Sudoku] - Use OneChoice for square R3C1

7	18	6	3	5	4	9	18	2
3	2	9	6	8	1	7	4	5
1	4	5	9	2	7	3	18	6
8	67	7	5	4	3	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	7	5	2	9	1
9	1	8	2	3	6	5	7	4
15	17	27	4	1	9	6	3	8

## Update Candidate Values during [Step 51 of Solving this Sudoku]

7	8	6	3	5	4	9	18	2
3	2	9	6	8	1	7	4	5
1	4	5	9	2	7	3	8	6
8	67	7	5	4	3	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	7	5	2	9	1
9	1	8	2	3	6	5	7	4
5	17	27	4	1	9	6	3	8



Try OneChoice;

[Step 52 of Solving this Sudoku] - Use OneChoice for square R1C2

7	8	6	3	5	4	9	18	2
3	2	9	6	8	1	7	4	5
1	4	5	9	2	7	3	8	6
8	67	7	5	4	3	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	7	5	2	9	1
9	1	8	2	3	6	5	7	4
5	17	27	4	1	9	6	3	8

## Update Candidate Values during [Step 52 of Solving this Sudoku]

7	8	6	3	5	4	9	1	2
3	2	9	6	8	1	7	4	5
1	4	5	9	2	7	3	8	6
8	67	7	5	4	3	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	7	5	2	9	1
9	1	8	2	3	6	5	7	4
5	17	27	4	1	9	6	3	8

Try OneChoice;

[Step 53 of Solving this Sudoku] - Use OneChoice for square R1C8

7	8	6	3	5	4	9	1	2
3	2	9	6	8	1	7	4	5
1	4	5	9	2	7	3	8	6
8	67	7	5	4	3	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	7	5	2	9	1
9	1	8	2	3	6	5	7	4
5	17	27	4	1	9	6	3	8

## Update Candidate Values during [Step 53 of Solving this Sudoku]

7	8	6	3	5	4	9	1	2
3	2	9	6	8	1	7	4	5
1	4	5	9	2	7	3	8	6
8	67	7	5	4	3	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	7	5	2	9	1
9	1	8	2	3	6	5	7	4
5	17	27	4	1	9	6	3	8

Try OneChoice;

[Step 54 of Solving this Sudoku] - Use OneChoice for square R3C8

7	8	6	3	5	4	9	1	2
3	2	9	6	8	1	7	4	5
1	4	5	9	2	7	3	8	6
8	67	7	5	4	3	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	7	5	2	9	1
9	1	8	2	3	6	5	7	4
5	17	27	4	1	9	6	3	8

## Update Candidate Values during [Step 54 of Solving this Sudoku]

7	8	6	3	5	4	9	1	2
3	2	9	6	8	1	7	4	5
1	4	5	9	2	7	3	8	6
8	67	7	5	4	3	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	7	5	2	9	1
9	1	8	2	3	6	5	7	4
5	17	27	4	1	9	6	3	8

Try OneChoice;

[Step 55 of Solving this Sudoku] - Use OneChoice for square R4C3

7	8	6	3	5	4	9	1	2
3	2	9	6	8	1	7	4	5
1	4	5	9	2	7	3	8	6
8	67	7	5	4	3	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	7	5	2	9	1
9	1	8	2	3	6	5	7	4
5	17	27	4	1	9	6	3	8

## Update Candidate Values during [Step 55 of Solving this Sudoku]

7	8	6	3	5	4	9	1	2
3	2	9	6	8	1	7	4	5
1	4	5	9	2	7	3	8	6
8	6	7	5	4	3	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	7	5	2	9	1
9	1	8	2	3	6	5	7	4
5	17	2	4	1	9	6	3	8



Try OneChoice;

[Step 56 of Solving this Sudoku] - Use OneChoice for square R4C2

7	8	6	3	5	4	9	1	2
3	2	9	6	8	1	7	4	5
1	4	5	9	2	7	3	8	6
8	6	7	5	4	3	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	7	5	2	9	1
9	1	8	2	3	6	5	7	4
5	17	2	4	1	9	6	3	8

## Update Candidate Values during [Step 56 of Solving this Sudoku]

7	8	6	3	5	4	9	1	2
3	2	9	6	8	1	7	4	5
1	4	5	9	2	7	3	8	6
8	6	7	5	4	3	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	7	5	2	9	1
9	1	8	2	3	6	5	7	4
5	17	2	4	1	9	6	3	8

Try OneChoice;

[Step 57 of Solving this Sudoku] - Use OneChoice for square R8C2

7	8	6	3	5	4	9	1	2
3	2	9	6	8	1	7	4	5
1	4	5	9	2	7	3	8	6
8	6	7	5	4	3	1	2	9
2	9	3	1	6	8	4	5	7
4	5	1	7	9	2	8	6	3
6	3	4	8	7	5	2	9	1
9	1	8	2	3	6	5	7	4
5	17	2	4	1	9	6	3	8

## Update Candidate Values during [Step 57 of Solving this Sudoku]

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

Try OneChoice;

[Step 58 of Solving this Sudoku] - Use OneChoice for square R9C1

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

## Update Candidate Values during [Step 58 of Solving this Sudoku]

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

Try OneChoice;

[Step 59 of Solving this Sudoku] - Use OneChoice for square R9C2

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

## Update Candidate Values during [Step 59 of Solving this Sudoku]

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



Try OneChoice;

[Step 60 of Solving this Sudoku] - Use OneChoice for square R9C3

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

## Update Candidate Values during [Step 60 of Solving this Sudoku]

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

Try OneChoice;

[Step 61 of Solving this Sudoku] - Use OneChoice for square R9C4

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

## Update Candidate Values during [Step 61 of Solving this Sudoku]

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

Try OneChoice;

[Step 62 of Solving this Sudoku] - Use OneChoice for square R9C5

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

## Update Candidate Values during [Step 62 of Solving this Sudoku]

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

Try OneChoice;

[Step 63 of Solving this Sudoku] - Use OneChoice for square R9C6

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