

Sudoku Puzzle Solution

Generated on 06-10-2025, 09-13 PM

This document contains a step-by-step breakdown of the solved Sudoku puzzle, including logic used, explanation for each move, and how Sudoku works.

How to Play Sudoku

Basic Rule: Fill the 9×9 grid with numbers 1-9, ensuring each number appears exactly once in every row, column, and 3×3 box.

Solving Techniques:

1. Basic Techniques:

- Scanning: Check rows, columns, and boxes to find where a number can legally be placed
- Single Candidate (Naked Single): When only one number can go in a cell
- Hidden Singles: When a number can only go in one cell within a row, column, or box

2. Intermediate Techniques:

- Pointing Pairs/Triples: When a number is restricted to 2-3 cells in a box, aligned in a row/column
- Box/Line Reduction: When a number in a row/column must be in a specific box
- Hidden Pairs: When two cells in a unit share the same two candidates exclusively
- Naked Pairs/Triples: When 2-3 cells contain the same 2-3 candidates only

3. Advanced Techniques:

- X-Wing: When a number appears in exactly two positions in two different rows/columns
- Swordfish: Similar to X-Wing but with three rows/columns
- XY-Wing: A pattern involving three cells with specific candidate relationships
- Remote Pairs: Chain of pairs that can help eliminate candidates

Step-by-Step Solution

Initial Puzzle

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

Solution Summary:

This document contains a step-by-step breakdown of the solved Sudoku puzzle, including logic used, explanation for each move, and how Sudoku works.

Total Steps: 51

Techniques Used:

- Naked Single: 51 moves (100%)

Step 1

Move Details

Location: Row 3, Column 7 (Box 3)

Value Placed: 9

Technique: Naked Single

Difficulty: Basic

4	8	1
6	2	7
9	3	5



Current Move

Move Explanation

The cell at Row 3, Column 7 has 9 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 3). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 2

Move Details

Location: Row 2, Column 7 (Box 3)

Value Placed: 6

Technique: Naked Single

Difficulty: Basic

4	8	1
6	2	7
9	3	5



Current Move

Move Explanation

The cell at Row 2, Column 7 has 6 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 3). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 3

Move Details

Location: Row 2, Column 9 (Box 3)

Value Placed: 7

Technique: Naked Single

Difficulty: Basic

4	8	1
6	2	7
9	3	5



Current Move

Move Explanation

The cell at Row 2, Column 9 has 7 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 3). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 4

Move Details

Location: Row 2, Column 2 (Box 1)

Value Placed: 5

Technique: Naked Single

Difficulty: Basic

9	7	3
8	5	1
4	6	2



Current Move

Move Explanation

The cell at Row 2, Column 2 has 5 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 1). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 5

Move Details

Location: Row 1, Column 2 (Box 1)

Value Placed: 7

Technique: Naked Single

Difficulty: Basic

9	7	3
8	5	1
4	6	2



Current Move

Move Explanation

The cell at Row 1, Column 2 has 7 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 1). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 6

Move Details

Location: Row 2, Column 6 (Box 2)

Value Placed: 9

Technique: Naked Single

Difficulty: Basic

5	6	2
4	3	9
8	1	7



Current Move

Move Explanation

The cell at Row 2, Column 6 has 9 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 2). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 7

Move Details

Location: Row 1, Column 5 (Box 2)

Value Placed: 6

Technique: Naked Single

Difficulty: Basic

5	6	2
4	3	9
8	1	7



Current Move

Move Explanation

The cell at Row 1, Column 5 has 6 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 2). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 8

Move Details


Location: Row 2, Column 4 (Box 2)

Value Placed: 4

Technique: Naked Single

Difficulty: Basic

5	6	2
4	3	9
8	1	7

 Current Move

Move Explanation

The cell at Row 2, Column 4 has 4 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 2). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 9

Move Details

Location: Row 3, Column 8 (Box 3)

Value Placed: 3

Technique: Naked Single

Difficulty: Basic

4	8	1
6	2	7
9	3	5



Current Move

Move Explanation

The cell at Row 3, Column 8 has 3 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 3). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 10

Move Details

Location: Row 1, Column 8 (Box 3)

Value Placed: 8

Technique: Naked Single

Difficulty: Basic

4	8	1
6	2	7
9	3	5

 Current Move

Move Explanation

The cell at Row 1, Column 8 has 8 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 3). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 11

Move Details

Location: Row 1, Column 9 (Box 3)

Value Placed: 1

Technique: Naked Single

Difficulty: Basic

4	8	1
6	2	7
9	3	5



Current Move

Move Explanation

The cell at Row 1, Column 9 has 1 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 3). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 12

Move Details

Location: Row 3, Column 3 (Box 1)

Value Placed: 2

Technique: Naked Single

Difficulty: Basic

9	7	3
8	5	1
4	6	2



Current Move

Move Explanation

The cell at Row 3, Column 3 has 2 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 1). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 13

Move Details

Location: Row 1, Column 3 (Box 1)

Value Placed: 3

Technique: Naked Single

Difficulty: Basic

9	7	3
8	5	1
4	6	2



Current Move

Move Explanation

The cell at Row 1, Column 3 has 3 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 1). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 14

Move Details

Location: Row 1, Column 1 (Box 1)

Value Placed: 9

Technique: Naked Single

Difficulty: Basic

9	7	3
8	5	1
4	6	2



Current Move

Move Explanation

The cell at Row 1, Column 1 has 9 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 1). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 15

Move Details

Location: Row 3, Column 6 (Box 2)

Value Placed: 7

Technique: Naked Single

Difficulty: Basic

5	6	2
4	3	9
8	1	7



Current Move

Move Explanation

The cell at Row 3, Column 6 has 7 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 2). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 16

Move Details


Location: Row 5, Column 2 (Box 4)

Value Placed: 8

Technique: Naked Single

Difficulty: Basic

6	3	9
5	8	4
1	2	7

 Current Move

Move Explanation

The cell at Row 5, Column 2 has 8 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 4). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 17

Move Details

Location: Row 6, Column 7 (Box 6)

Value Placed: 5

Technique: Naked Single

Difficulty: Basic

2	1	8
7	6	3
5	9	4



Current Move

Move Explanation

The cell at Row 6, Column 7 has 5 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 6). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 18

Move Details

Location: Row 7, Column 9 (Box 9)

Value Placed: 9

Technique: Naked Single

Difficulty: Basic

1	5	9
3	7	6
8	4	2



Current Move

Move Explanation

The cell at Row 7, Column 9 has 9 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 9). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 19

Move Details

Location: Row 8, Column 3 (Box 7)

Value Placed: 8

Technique: Naked Single

Difficulty: Basic

3	4	6
2	9	8
7	1	5



Current Move

Move Explanation

The cell at Row 8, Column 3 has 8 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 7). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 20

Move Details

Location: Row 8, Column 9 (Box 9)

Value Placed: 6

Technique: Naked Single

Difficulty: Basic

1	5	9
3	7	6
8	4	2



Current Move

Move Explanation

The cell at Row 8, Column 9 has 6 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 9). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 21

Move Details


Location: Row 8, Column 8 (Box 9)

Value Placed: 7

Technique: Naked Single

Difficulty: Basic

1	5	9
3	7	6
8	4	2

 Current Move

Move Explanation

The cell at Row 8, Column 8 has 7 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 9). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 22

Move Details

Location: Row 7, Column 8 (Box 9)

Value Placed: 5

Technique: Naked Single

Difficulty: Basic

1	5	9
3	7	6
8	4	2



Current Move

Move Explanation

The cell at Row 7, Column 8 has 5 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 9). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 23

Move Details


Location: Row 7, Column 1 (Box 7)

Value Placed: 3

Technique: Naked Single

Difficulty: Basic

3	4	6
2	9	8
7	1	5

 Current Move

Move Explanation

The cell at Row 7, Column 1 has 3 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 7). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 24

Move Details

Location: Row 8, Column 4 (Box 8)

Value Placed: 1

Technique: Naked Single

Difficulty: Basic

2	7	8
1	5	4
6	9	3



Current Move

Move Explanation

The cell at Row 8, Column 4 has 1 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 8). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 25

Move Details

Location: Row 9, Column 3 (Box 7)

Value Placed: 5

Technique: Naked Single

Difficulty: Basic

3	4	6
2	9	8
7	1	5



Current Move

Move Explanation

The cell at Row 9, Column 3 has 5 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 7). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 26

Move Details


Location: Row 5, Column 3 (Box 4)

Value Placed: 4

Technique: Naked Single

Difficulty: Basic

6	3	9
5	8	4
1	2	7

 Current Move

Move Explanation

The cell at Row 5, Column 3 has 4 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 4). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 27

Move Details

Location: Row 5, Column 9 (Box 6)

Value Placed: 3

Technique: Naked Single

Difficulty: Basic

2	1	8
7	6	3
5	9	4



Current Move

Move Explanation

The cell at Row 5, Column 9 has 3 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 6). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 28

Move Details

Location: Row 6, Column 3 (Box 4)

Value Placed: 7

Technique: Naked Single

Difficulty: Basic

6	3	9
5	8	4
1	2	7

Current Move

Move Explanation

The cell at Row 6, Column 3 has 7 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 4). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 29

Move Details

Location: Row 6, Column 9 (Box 6)

Value Placed: 4

Technique: Naked Single

Difficulty: Basic

2	1	8
7	6	3
5	9	4



Current Move

Move Explanation

The cell at Row 6, Column 9 has 4 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 6). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 30

Move Details

Location: Row 9, Column 7 (Box 9)

Value Placed: 8

Technique: Naked Single

Difficulty: Basic

1	5	9
3	7	6
8	4	2



Current Move

Move Explanation

The cell at Row 9, Column 7 has 8 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 9). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 31

Move Details

Location: Row 7, Column 7 (Box 9)

Value Placed: 1

Technique: Naked Single

Difficulty: Basic

1	5	9
3	7	6
8	4	2



Current Move

Move Explanation

The cell at Row 7, Column 7 has 1 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 9). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 32

Move Details

Location: Row 9, Column 5 (Box 8)

Value Placed: 9

Technique: Naked Single

Difficulty: Basic

2	7	8
1	5	4
6	9	3



Current Move

Move Explanation

The cell at Row 9, Column 5 has 9 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 8). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 33

Move Details

Location: Row 6, Column 5 (Box 5)

Value Placed: 8

Technique: Naked Single

Difficulty: Basic

7	4	5
9	2	1
3	8	6



Current Move

Move Explanation

The cell at Row 6, Column 5 has 8 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 5). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 34

Move Details

Location: Row 6, Column 6 (Box 5)

Value Placed: 6

Technique: Naked Single

Difficulty: Basic

7	4	5
9	2	1
3	8	6



Current Move

Move Explanation

The cell at Row 6, Column 6 has 6 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 5). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 35

Move Details

Location: Row 4, Column 6 (Box 5)

Value Placed: 5

Technique: Naked Single

Difficulty: Basic

7	4	5
9	2	1
3	8	6

Current Move

Move Explanation

The cell at Row 4, Column 6 has 5 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 5). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 36

Move Details


Location: Row 1, Column 6 (Box 2)

Value Placed: 2

Technique: Naked Single

Difficulty: Basic

5	6	2
4	3	9
8	1	7

 Current Move

Move Explanation

The cell at Row 1, Column 6 has 2 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 2). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 37

Move Details

Location: Row 1, Column 4 (Box 2)

Value Placed: 5

Technique: Naked Single

Difficulty: Basic

5	6	2
4	3	9
8	1	7



Current Move

Move Explanation

The cell at Row 1, Column 4 has 5 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 2). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 38

Move Details

Location: Row 4, Column 1 (Box 4)

Value Placed: 6

Technique: Naked Single

Difficulty: Basic

6	3	9
5	8	4
1	2	7



Current Move

Move Explanation

The cell at Row 4, Column 1 has 6 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 4). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 39

Move Details


Location: Row 4, Column 4 (Box 5)

Value Placed: 7

Technique: Naked Single

Difficulty: Basic

7	4	5
9	2	1
3	8	6

 Current Move

Move Explanation

The cell at Row 4, Column 4 has 7 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 5). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 40

Move Details

Location: Row 4, Column 5 (Box 5)

Value Placed: 4

Technique: Naked Single

Difficulty: Basic

7	4	5
9	2	1
3	8	6



Current Move

Move Explanation

The cell at Row 4, Column 5 has 4 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 5). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 41

Move Details


Location: Row 5, Column 1 (Box 4)

Value Placed: 5

Technique: Naked Single

Difficulty: Basic

6	3	9
5	8	4
1	2	7

 Current Move

Move Explanation

The cell at Row 5, Column 1 has 5 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 4). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 42

Move Details

Location: Row 5, Column 4 (Box 5)

Value Placed: 9

Technique: Naked Single

Difficulty: Basic

7	4	5
9	2	1
3	8	6



Current Move

Move Explanation

The cell at Row 5, Column 4 has 9 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 5). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 43

Move Details

Location: Row 5, Column 8 (Box 6)

Value Placed: 6

Technique: Naked Single

Difficulty: Basic

2	1	8
7	6	3
5	9	4



Current Move

Move Explanation

The cell at Row 5, Column 8 has 6 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 6). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 44

Move Details

Location: Row 6, Column 1 (Box 4)

Value Placed: 1

Technique: Naked Single

Difficulty: Basic

6	3	9
5	8	4
1	2	7



Current Move

Move Explanation

The cell at Row 6, Column 1 has 1 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 4). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 45

Move Details

Location: Row 6, Column 4 (Box 5)

Value Placed: 3

Technique: Naked Single

Difficulty: Basic

7	4	5
9	2	1
3	8	6



Current Move

Move Explanation

The cell at Row 6, Column 4 has 3 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 5). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 46

Move Details

Location: Row 6, Column 8 (Box 6)

Value Placed: 9

Technique: Naked Single

Difficulty: Basic

2	1	8
7	6	3
5	9	4



Current Move

Move Explanation

The cell at Row 6, Column 8 has 9 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 6). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 47

Move Details

Location: Row 7, Column 4 (Box 8)

Value Placed: 2

Technique: Naked Single

Difficulty: Basic

2	7	8
1	5	4
6	9	3



Current Move

Move Explanation

The cell at Row 7, Column 4 has 2 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 8). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 48

Move Details

Location: Row 7, Column 5 (Box 8)

Value Placed: 7

Technique: Naked Single

Difficulty: Basic

2	7	8
1	5	4
6	9	3



Current Move

Move Explanation

The cell at Row 7, Column 5 has 7 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 8). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 49

Move Details


Location: Row 7, Column 6 (Box 8)

Value Placed: 8

Technique: Naked Single

Difficulty: Basic

2	7	8
1	5	4
6	9	3

 Current Move

Move Explanation

The cell at Row 7, Column 6 has 8 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 8). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 50

Move Details

Location: Row 9, Column 4 (Box 8)

Value Placed: 6

Technique: Naked Single

Difficulty: Basic

2	7	8
1	5	4
6	9	3



Current Move

Move Explanation

The cell at Row 9, Column 4 has 6 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 8). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Step 51

Move Details

Location: Row 9, Column 8 (Box 9)

Value Placed: 4

Technique: Naked Single

Difficulty: Basic

1	5	9
3	7	6
8	4	2



Current Move

Move Explanation

The cell at Row 9, Column 8 has 4 as the only possible value. This is because all other numbers (1-9) are already present in either the same row, column, or 3x3 box (Box 9). By analyzing the constraints, we can see that this is the only valid choice for this cell.

Technique Details

Technique Details

A Naked Single occurs when a cell has only one possible candidate value remaining. This happens when all other numbers from 1 to 9 are already present in the same row, column, or 3x3 block as that cell. This is one of the most basic and commonly used techniques in Sudoku solving.

Solution Statistics

Difficulty Distribution:

- Basic: 51 moves (100%)

Strategy Distribution:

- Naked Single: 51 moves (100%)

Final Solved Puzzle

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