

In [4]: #Name: Mohith Dande

Given Puzzle:

```
  _ 3 _  
  3 _ 1  
3 _ _  
  1 _ _
```

We need to fill it using digits 1 to 4, so that:

Each row, column, and each 2×2 box has all numbers from 1 to 4 once.

Step 1: Fill Row 2

Row 2: _ 3 _ 1

Numbers missing: 2 and 4

Try:

Row 2 = 2 3 4 1 (No repeats in row, columns, or box)

Step 2: Fill Row 1

Row 1: _ _ 3 _

With Row 2 known, it becomes easy.

Missing numbers: 1, 2, 4

Try:

Row 1 = 1 4 3 2 (All good in row, columns, and box)

Step 3: Fill Row 3

Row 3: 3 _ _ _

Missing numbers: 1, 2, 4

Try:

Row 3 = 3 2 1 4

Step 4: Fill Row 4

Row 4: _ 1 _ _

Missing numbers: 2, 3, 4

Try:

Row 4 = 4 1 2 3

Final Answer (Complete Grid):

1 4 3 2

2 3 4 1

3 2 1 4

4 1 2 3

Every row, column, and 2×2 box has 1, 2, 3, 4 with no repeats.

In [1]: