

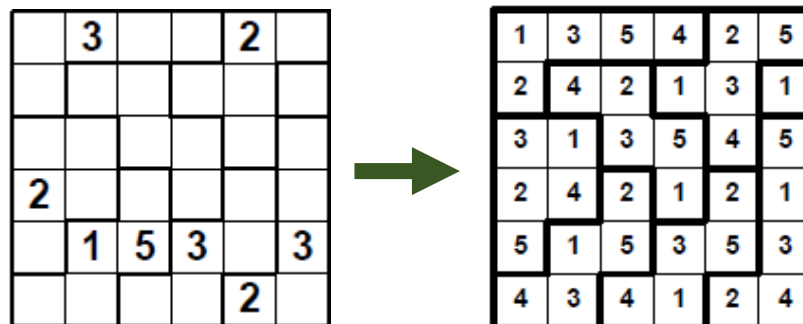
## CSE 404: Task-4

### Solving “Suguru Puzzle” using CSP

In this assignment you will have to solve the Suguru Puzzle as constraint satisfaction problem using the open source java library choco-solver.

Suguru, also known as Tectonics or Number Blocks, puzzles are quite different than Sudoku, so you'll want to read these rules carefully: A Grid of  $N \times N$  size. You'll see that the grid is subdivided into containers or cages, each of which is 1 to 5 cells in size. You need to fill each container with unique digits, counting up from 1. So for example a 2-square container contains the numbers 1 and 2. A 5-square container contains the numbers from 1 to 5. Adjacent (touching) cells may **never contain the same number**, and this includes diagonally adjacent cells. That's it!

### The Problem



### CSP

Refer to the slide provided in class

### The Tasks

1. You have to choose one of the problem from the **suguru book** provided according to the following criteria and write a constraint program (CP) to solve it.
2. Problem selection criteria:
  - a. Select book,  $n = [\text{Last\_3\_digit\_of\_Student\_ID} \bmod 6] + 1$
  - b. Select problem,  $p = [\text{Last\_3\_digit\_of\_Student\_ID} \bmod 16] + 1$
  - c. Your problem will be **suguru#<p>** from **suguru\_book\_<n>**