## AAA Project Solving Sudoku using the backtracking algorithm

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## 1 Introduction

Sudoku is a numerical puzzle game. The idea is to solve an  $n \times n$  grid filled with numbers, this grid usually consists of square blocks with 3 rows and 3 columns. These individual blocks are then arranged in a similar manner again, with 3 blocks along rows and 3 along columns, producing a  $9 \times 9$  matrix. We need to fill the blocks with one of these numbers 1, 2, 3, 4, 5, 6, 7, 8, 9. The rules for filling these blocks are as follows:

- Within each block we can only have single occurrence of a number.
- Along a each row we can only have single occurrence of a number.
- Along a each column we can only have a single occurrence of a number.

#Fill in facts#

- 2 Aims
- 3 Summary of Theory
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