Conway's Game of Life

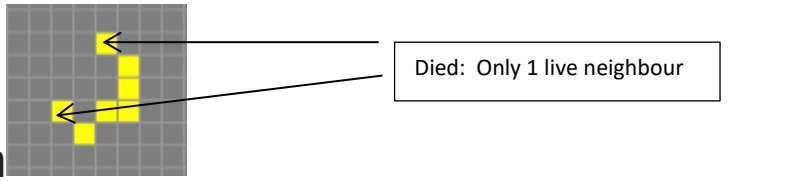
Start using squared paper. Lightly colour in about 8 squares, some next to each other, some about 1 square away. The coloured squares are live, the blank squares dead.

In your second turn (or generation), rub out or colour in squares according to these rules:

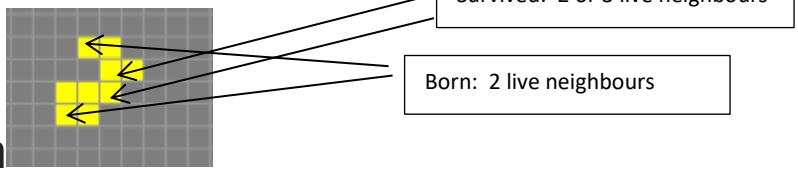
1. Any live cell with fewer than two live neighbours dies, as if by under population.
2. Any live cell with two or three live neighbours lives on to the next generation.
3. Any live cell with more than three live neighbours dies, as if by overpopulation.
4. Any dead cell with exactly three live neighbours becomes a live cell, as if by reproduction.

Here's an example:

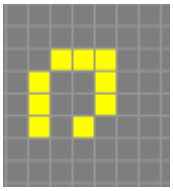
1st Generation



2nd Generation



3rd Generation



Try this on paper for a few generations, to understand the rules. Then try this computer simulation: https://playgameoflife.com/ See if you can make a starter pattern that continually gets bigger, and one that reaches a steady state. What sort of patterns become extinct?