For this assignment, working as a team of 3, we were tasked with developing a program capable of generating a 1-D Cellular Automata and Conway's Game of Life.

We decided to use C++ programming language. All three of us had minimal experience coding in C++, so we used the assignment as an opportunity to gain experience and boost our knowledge of the programming language. This was a good choice, as we all became more confident in using C++.

As we were inexperienced, we decided to start on the first day. The design aspect was challenging, as we had bare minimum knowledge of C++ and its standards. We first wrote down a simple pseudocode for how the program would work and then based on that wrote a plan containing all the functions we thought we needed. During the implementation process, we noticed the design would not work correctly and efficiently, which lead to us changing the plan on the go. While this made the implementation confusing, due to communicating regaluary on current status, we managed to pull through. Overall, due to planning we had a basic idea on what to do, but it needed a lot of work to get the program operating as required. And now that we have experience of developing in C++, future projects will be easier to design and develop.

During the project, we communicated regularly. Since we had no experience and a basic idea of what's possible in C++, we knew communication would be key. The three of us focused on different aspects of the program - randomly generating rules & generations, saving & loading, generating cellular automata - making us learn a variety of different things, different ways of going about the same task. We frequently discussed about ways to go about tasks taking into account validation and efficiently. This greatly increased our growth.