While working on each function for my MATLAB project, I implemented all the concepts that I have learned from my practical classes such as creating functions with parameters, vectors/matrices, accessing and reading data from file, nested loops. Furthermore, I also implemented switch statements, if statements and while loops to make the program run continuously until the user wants to exit the program. Moreover, my program contains around 9 functions consisting of games, mathematical equations graphing and also some other functions aswell. While making the program I had write around 800 – 1000 lines of code, although some of the functions might look basic but they are helpful and demonstrates some of the crucial programming concepts in MATLAB.

In addition to that, the program also contains complex functions which combines various concepts together to make the program such as the functions called “Battleships” and “Game of Life”. The Battleship game, which is a game similar to the board game but I had to make some adjustments to make it fun and interesting. Whereas, in the game of life, it shows a simulation of the outcome of a population over a period of time. There are also some other games which are slightly less complex to code but really fun to play such as “guess the name of the country” and “guess the name of the flag”, both of them might have similar name, they are played differently and also, they are randomised to make the games more fun to play.

Each function in the program was built on multiple stages and to make debugging and testing simpler therefore, I created a different MATLAB script file to test and debug each function and included them in the main program once I was satisfied with the software. During my testing phase I made sure to include some comments and followed the correct naming notation on each step to help other and me to understand the code.