Chapter 1 Notes

It is useful to approximate a solution when analytical solutions cannot be achieved.

Use Taylor expansion to approximate ordinary DE. If delta t (time step) is made larger, the percentage of error increases.

This is called the Euler method, which is useful when approaching ordinary DE.

Before writing code, construct an outline of how the problem will be solved (what parameters/variables to use).

Steps to solve:

- Declare variables and arrays
- Initialize variables
- Do the calculation
- Store the results

After calculation, graph the data to better understand it

Always check the program

A calculation should always be repeated using different step sizes

Use comments statements, sacrifice most everything for clarity (make the program understandable).