**Instructions:**

**You are allowed to complete the assessment problems below in whatever way you can but please answer the following questions/points as part of your submission:**

1. How many hours did it take you to complete this assessment? (Please keep try to keep track of how many hours you have spent working on each individual part of this assessment as best you can - an estimation is fine; we just want a rough idea.)

This QAP took me approximately 5 hours to complete, with the majority of that on the last question

1. What online resources you have used? (My lectures, YouTube, Stack overflow etc.)

Lecture and YouTube

1. Did you need to ask any of your friends in solving the problems. (If yes, please mention name of the friend. They must be amongst your class fellows.)

No

1. Did you need to ask questions to any of your instructors? If so, how many questions did you ask (or how many help sessions did you require)?

No

1. Rate (subjectively) the difficulty of each question from your own perspective, and whether you feel confident that you can solve a similar but different problem requiring some of the same techniques in the future now that you’ve completed this one.

The first 2 were time consuming but fine, the last one took a long time and was the most difficult, however it was good to create classes from diagrams. I think I may be able to do it again, but I’d need assistance from course material