**Task 4.2HD – Answers**

Question #1:

<https://youtu.be/UE5KLmglCv8>

Question #2:

<https://github.com/Goolog/SIT210-Task4.2HD-ParticleCloudFunction>

Question #3:

One could use a system like this to manually control the flow of traffic through an intersection of road. This can be especially useful in areas where automatic traffic management is not possible.

Question #4:

This is a really basic system. There are therefore many ways it can be improved. One could use motion sensors to detect which directions cars may be coming from. This sensor data could be used in the particle program code to determine which sets of traffic lights should be red, yellow and green. The user interface in the webpage could also be improved so that it can be more user-friendly. This is especially important when multiple sets of traffic lights are being controlled from the one computer. It is important that each set of traffic lights is configured correctly or else it could result in a collision between two or more cars.