

## Task 4.2HD Particle - Calling a function from Web

Question 1

<https://youtu.be/xRTX6QCNUgE>

Question 2

<https://github.com/Kushan-Nilanga/SIT210/tree/master/calling-function>

Question 3

- A real time traffic control system could be implemented from this system. A traffic control system that can dynamically change the duration automatically with the traffic data would be really helpful for urban areas.
- A railway crossing system could be implemented from improving this system.

Question 4

This is one of the projects that the limitation is our imagination. Complex logistic planning and traffic control can be achieved by improving this systems. Given below are some of the improvements I would like to explore.

- Developing more sophisticated Sense Think Act systems
  - The current system is manual and this can be automated using sensor inputs to monitor traffic flow.
  - A pressure sensors or cameras can be used to identify traffic and change traffic lights.
  - The data collected from system can be shared with a centralised control system.
- Using algorithmic control for better traffic control
  - Different learning algorithms can be used to improve traffic management eg. Deep learning
  - Scalable learning algorithms can be used with multiple such intersections powered by traffic lights for data gathering
- Special access for emergency vehicles
  - Drivers of emergency vehicles has to make many risky actions while driving. We can provide a safe passage to these drivers by overriding the signal lights manually in case of emergency.