Task 3

Questions:

Suggest a use case scenario for each of the QoS levels and provide justification to your choice with reference to the characteristics of the QoS levels.

Answers:

There are 3 QoS levels in MQTT, at most once (0), At least once (1), and exactly once (2). QoS gives the client the power to choose a level of services that matches its network reliability and application logic. From all QoS levels, the QoS 2 is the safest yet also the slowest quality service level, different with QoS 0. Therefore, we use QoS 0 when we have a completely stable connections between receiver and sender and we don’t mind a few messages are lost in a few times because QoS 0 does not guarantee 100% successful delivery and the receiver does not acknowledge receipts of the messages with the same scenario for the sender. Moreover, we use QoS 1 when duplicates of message is acceptable and we do not need a fast delivery messages but we also do not want a very slow delivery too. Finally, we use QoS 2 when it is very important that our applications has to receive all the message exactly once. And a slow delivery message is reasonable.