**HLTWK5**

Linear regression falls under supervised learning as it requires labelled data. This algorithm is mostly used when we are trying to find a relationship of both the dependent and independent variables to make a prediction. There are many use cases for using linear regression, one of them being its simplicity and how easy it is to interpretate. The other useful feature is that it really helps find the relationship between the variables using statistical measurements. This algorithm is really common in medical research to find a correlation in drug dosage and the patient’s blood pressure and many other fields that are trying to analyse sets of data.

**HLTWK6**

Responsible ai is a framework that governs how an organisation goes about how it collects data, how models should be evaluated and other things to ensure that the ai is less of risk in terms of safety and security. One instance in where artificial intelligence has failed is when Microsoft released its chatbot ai called Tay (short for thinking about you). This AI showed a lot of promise on twitter as it was able to learn from interacting with others and was able to incorporate those interactions into its language. Tay soon devolved as people started figuring out its algorithm and started teaching it sexist and racist remarks. Microsoft caught wind of this and they shut it down within 24 hours of its launch. Ultimately, if artificial intelligence fails it is most of the time due to the organisation's negligence and in the cases where it is, they should be fully responsible and prepare for actions on how to minimise failure. Organisations should not give full reign to ai and should constantly self-regulate in important areas such as who to prioritise for medical treatment or in other cases where could harm a person’s livelihood.