**Notes:**

**Intro to Machine Learning:**

* Machine Learning comes in when choices become obscure and difficult to make
* K-Nearest Neighbours Algorithm chooses the option which has a higher concentration closer to query point
* Supervised learning is when the model is trained to recognise which features are associated with which label, therefore uses labelled data to train the model
* Unsupervised learning is when the model is trained using unlabelled data
* Reinforcement learning is when the model is trained using a reward and sanction system
* Applications -> Healthcare, Sentiment analysis, Fraud detection and E-commerce

**Types of Machine Learning and Algorithms:**

* K-Nearest Neighbours Algorithm (Supervised) -> looks at the closest number of K points, then makes the choice based on the highest number of matching points
* Linear Regression Model (Supervised) -> uses a dependent and an independent variable and estimates the relationship between both variables
* Decision Tree (Supervised) -> a graph that uses a branching method to show every possible outcome of a decision
* Naïve Bayes (Supervised) -> Naïve Bayes Classifiers use conditional probability to make decisions, and is particularly well used when the complexity of the outputs is high