

QUESTION AND ANSWERS

- 1) The name of the data set is Iris data, and we are working with three different types of species they are iris setosa, iris versicolor, and iris virginica.
- 2) X coordinate is sepal length, and the y coordinate is petal width
- 3) According to Mazen we can use the elbow method if we don't know how many clusters are present in the data and this elbow method mainly does the calculation of inertia for different numbers of clusters in the data.
- 4) 20%-40%, "cost management and containment" is their main worry when it comes to running big data cloud technologies and applications.
- 5) Enterprises can protect themselves from spending anomalies by continuously monitoring and optimizing cloud costs. the platform that can help protect enterprises from Amazon Web Services. The AWS products are AWS Cost Explorer to understand cloud billing and AWS Cost Anomaly Detection which enables users to detect, assess and evaluate unexpected cost anomalies in their AWS cloud services.
- 6) the four unsupervised machine learning algorithms used by the authors are Autoencoder (AE), Isolation Forest (IF), Lightweight On-Line Anomaly Detection (LODA), and Local Outlier Factor (LOF)
- 7) threat detection performance is measured using ROC (Receiving Characteristic Curve) and AUC metrics (Area Under the Curve). $DR = \frac{True\ Positive}{True\ Positive + False\ Negative}$ where DR is the detection rate. The LODA algorithm performed the best under normal conditions. LODA shows a great balance between detection performance and robustness, making it a prime candidate in severe poisoning condition.

8)