**DAILY LEARNING DAY 6**

1.MULTI CLASS CLASSIFICATION:

* Multiclass classification is the problem of classifying instances into one of three or more classes.
* It is also known as multinomial classification.
* Example:

1. In context of LiDAR dataset:

* If we are looking over land classification the 3 different classes can be:

CLASS 1: Vegetation

CLASS 2: Water

CLASS 3: Urban areas

* Assuming building detection, the different classes are:

CLASS 1: Low – rise buildings

CLASS 2: High - rise buildings

CLASS 3: Open parks or grounds

1. Similarly, in general when we apply multiclass classification on Sentiment Analysis, we have these three classes:

Class 1: Positive sentiment

Class 2: Neutral sentiment

Class 3: Negative sentiment It represents the outcome you are trying to understand or classify based on input features.

2.WHICH MODEL IS BEST AND WHY?

Hoeffding Tree Classifier is best model with accuracy of 0.9929 while making comparison between Hoeffding tree classifier and Logistic Regression.

It is so because Hoeffding tree classifier performs well with LiDAR dataset because it can handle large, streaming, and non-linear datasets efficiently.