**IRIS - Classification**

**Project Explanation :**

* As we have labeled data this problem belongs to Supervised learning .
* Since the targets we have to predict are divided into classes so it belongs to Classification .
* And the targets are divided into more than 2 classes thus it is a MultiClass Classification problem .
* In the dataset we have the info for three flowers (Iris-setosa,Iris-Versicolor,Iris-virginica) about their SepalLength(in cm),SepalWidth(in cm),PetalLength(in cm),PetalWidth(in cm).

**Tools Used:**

* Python 3.9.5
* Jupyter Notebook
* Pandas 1.2.4 for data analysis
* Seaborn 0.11.1 for data visualization
* Scikit-learn 0.24.2 for machine learning

**Algorithms used:**

* KNearestNeighbors : KNN algorithm assumes the similarity between the new case/data and available cases and puts the new case into the category that is most similar to the available categories.
* DecisionTree : Decision Tree algorithm uses a tree-like model of decisions to predict the targets.

**Conclusion:**

KNearestNeighbors model has an accuracy of 98% and Decision Tree model has an accuracy of 96% which is less than of our KNN model .