**Mini Project3** Dataset: Titanic Classification

**#Importing Libraries**

Cell: 1

Import Essential Libraries for Machine Learning: NumPy, Pandas, Matplotlib, Seaborn, Sklearn, xgboost, Classifier Algorithms, …

**#Load and Prepare Data**

Cell: 2

Load Dataset from CSV file as Data Frame in Pandas Library

**#EDA**

Cell: 3-61

Explore and Review Data with Pandas Method: head, tail, info, describe, shape, values, columns, value\_count, slicing, condition, crosstab, sort\_values, groupby, loc, iloc, drop

**#Data Preprocessing**

Cell: 62-92 , 136-149

Explore and Check and Find Missing Data, Scale Data and Encoder Data with Pandas Method: isnull, dropna, fillna, SimpleImputer, LabelEncoder,

**#Strorytelling – Visualization**

Cell: 93-135

Explore and Visualize Data with Matplotlib and Seaborn Method and Draw Different Charts

**#Train your model (Classification)**

Cell: 136-194

Train model with LogisticRegression & KNN & Native Bayes & linear, rbf, sigmoid SVC & DecisionTree & RandomForest & XGBoost and measure Errors with Sklearn Library and work with GridSearch

**#Test Result**

Cell: 195-200

Compare Metric Models and show them by Chart and Dataframe