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| CLASSIFICATION | REGRESSION |
| * The target variables are discrete. | * The target variables are continuous. |
| * Output is Categorical labels. | * Output is Continuous numerical values. |
| * Here we face the problems like binary Classification or Multi-Class Classification problems. | * Here we face problems like Linear Regression models as well as non-linear models. |
| * Problems like Spam Email Classification and disease prediction are solved using Classification Algorithms. | * Problems like House Price Prediction and rainfall Prediction like problems are solved using regression Algorithms. |
| * Example: Logistic Regression, Decision Trees, Random Forest, Support Vector Machines (SVM), K-Nearest Neighbors (K-NN), Naive Bayes, Neural Networks, K-Means Clustering, Multi-layer Perceptron (MLP), etc. | * **Example:** Linear Regression, Polynomial Regression, Ridge Regression, Lasso Regression, Support Vector Regression (SVR), Decision Trees for Regression, Random Forest Regression, K-Nearest Neighbors (K-NN) Regression, Neural Networks for Regression, etc. |