

Step 01: KNN Regressor: 1. Import data set 2. Separate x (Gender, Height) and y (y=Weight) 3. Train = 70%, Test = 30% 4. Apply Linear Regression 5. Evaluate Model (Accuracy, MSE, MAE) 6. Apply KNN Regressor: <https://scikit-learn.org/stable/modules/generated/sklearn.neighbors.KNeighborsRegressor.html> 7. Evaluate Model (Accuracy, MSE, Prediction) Tuning: 1. Apply Randomized Search CV to select best K value 2. Compare accuracy with default KNN and After tuning K value 3. Evaluate Model (Accuracy, MSE, Prediction) and Compare with Old KNN model and Linear regression as well.

Step 02: KNN Classifier: 1. Import data set 2. Separate x and y (y=diagnosis) 3. Train = 70%, Test = 30% 4. Apply KNN Classifier 5. Evaluate Model (Accuracy, Confusion Matrix, ROC, AUC, Classification Report) 6. Apply KNN Classifier: <https://scikit-learn.org/stable/modules/generated/sklearn.neighbors.KNeighborsClassifier.html> 7. Compare the model with decision tree classifier