**Classification**

Performed a classification learning algorithm to find a best model for predicting chronic kidney diseases is present/not.

Based on multiple algorithms performance Logistic Regression & Support Vector Machine looks very good predictive classification model.

**Decision Tree**:

A screenshot of a computer screen

AI-generated content may be incorrect.

The f1\_macro value of best parameter is {'criterion': 'entropy', 'max\_features': 'log2', 'splitter': 'best'}: 0.98490261799076

Roc\_auc value: 0.9803921568627452

**Random Forest**:

A screenshot of a computer screen

AI-generated content may be incorrect.

The f1\_macro value of best parameter is {'criterion': 'entropy', 'max\_features': 'sqrt', 'n\_estimators': 100}: 0.9849624060150376

Roc\_auc value: 0.9997608799617408

**Support Vector Machine**:

A screenshot of a graph

AI-generated content may be incorrect.

The f1\_macro value of best parameter is {'C': 10, 'gamma': 'auto', 'kernel': 'sigmoid'}: 0.9924946382275899

Roc\_auc value: 1.0

**LogisticRegression**:

A screenshot of a graph

AI-generated content may be incorrect.

The f1\_macro value of best parameter is {'penalty': 'l2', 'solver': 'liblinear'}: 0.98490261799076

Roc\_auc value: 0.9985652797704447

**KNN**:

A screenshot of a computer screen

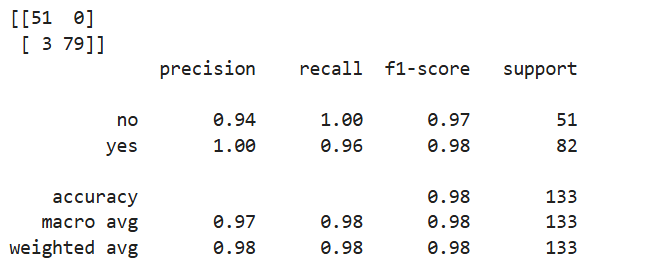
AI-generated content may be incorrect.

The f1\_macro value of best parameter is {'algorithm': 'auto', 'metric': 'minkowski', 'n\_neighbors': 3, 'p': 2, 'weights': 'uniform'}: 0.9626932787797391

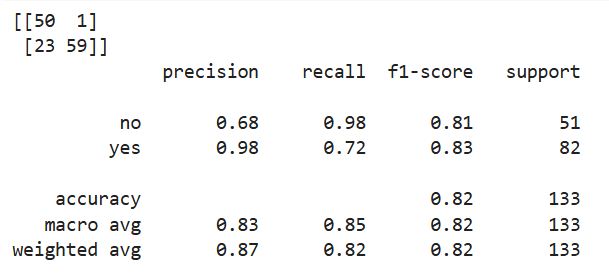
Roc\_auc value: 0.998804399808704

**Naives Bayes**:

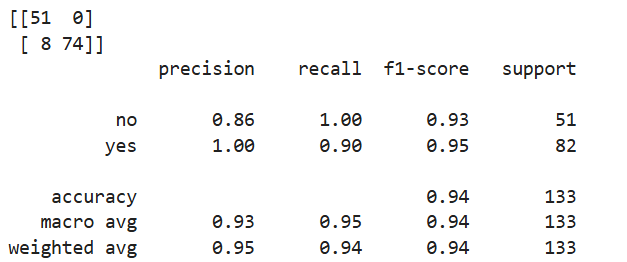
GaussianNB:



MultinomialNB:



BernoulliNB:



CategoricalNB:

