Predict the Chronic Kidney Disease (CKD)

Machine Learning - Supervised Learning- Classification.

(Total number of rows, columns)399 rows × 25 columns.

1. Logistic-Grid

```
print("The confusion Matrix:\n",cm)
```

```
The confusion Matrix:
 [[51  0]
 [ 1 81]]
```

```
print("The report:\n",clf_report)
```

```
The report:
              precision    recall  f1-score   support

           0       0.98      1.00      0.99        51
           1       1.00      0.99      0.99        82

    accuracy                           0.99       133
   macro avg       0.99      0.99      0.99       133
weighted avg       0.99      0.99      0.99       133
```

2. SVM-Grid

```
: print("The confusion Matrix:\n",cm)
```

```
The confusion Matrix:
 [[51  0]
 [ 1 81]]
```

```
: print("The report:\n",clf_report)
```

```
The report:
              precision    recall  f1-score   support

           0       0.98      1.00      0.99        51
           1       1.00      0.99      0.99        82

    accuracy                           0.99       133
   macro avg       0.99      0.99      0.99       133
weighted avg       0.99      0.99      0.99       133
```

3. DC-Grid

```
print("The confusion Matrix:\n",cm)
```

```
The confusion Matrix:
 [[49  2]
 [10 72]]
```

```
print("The report:\n",clf_report)
```

```
The report:
              precision    recall  f1-score   support

           0       0.83      0.96      0.89        51
           1       0.97      0.88      0.92        82

    accuracy                           0.91       133
   macro avg       0.90      0.92      0.91       133
weighted avg       0.92      0.91      0.91       133
```

4. RF-Grid

```
print("The confusion Matrix:\n",cm)
```

```
The confusion Matrix:
 [[50  1]
 [ 1 81]]
```

```
print("The report:\n",clf_report)
```

```
The report:
              precision    recall  f1-score   support

           0       0.98      0.98      0.98        51
           1       0.99      0.99      0.99        82

    accuracy                           0.98       133
   macro avg       0.98      0.98      0.98       133
weighted avg       0.98      0.98      0.98       133
```

5. KNN

```
print(clf_report)
```

```
              precision    recall  f1-score   support

           0       0.57      0.78      0.66        51
           1       0.83      0.63      0.72        82

    accuracy                           0.69       133
   macro avg       0.70      0.71      0.69       133
weighted avg       0.73      0.69      0.70       133
```

```
print(cm)
```

```
[[40 11]
 [30 52]]
```

6. Naive Bayes

```
              precision    recall  f1-score   support

           0       0.86      1.00      0.93        51
           1       1.00      0.90      0.95        82

    accuracy                           0.94       133
   macro avg       0.93      0.95      0.94       133
weighted avg       0.95      0.94      0.94       133

[[51  0]
 [ 8 74]]
```