Machine Learning

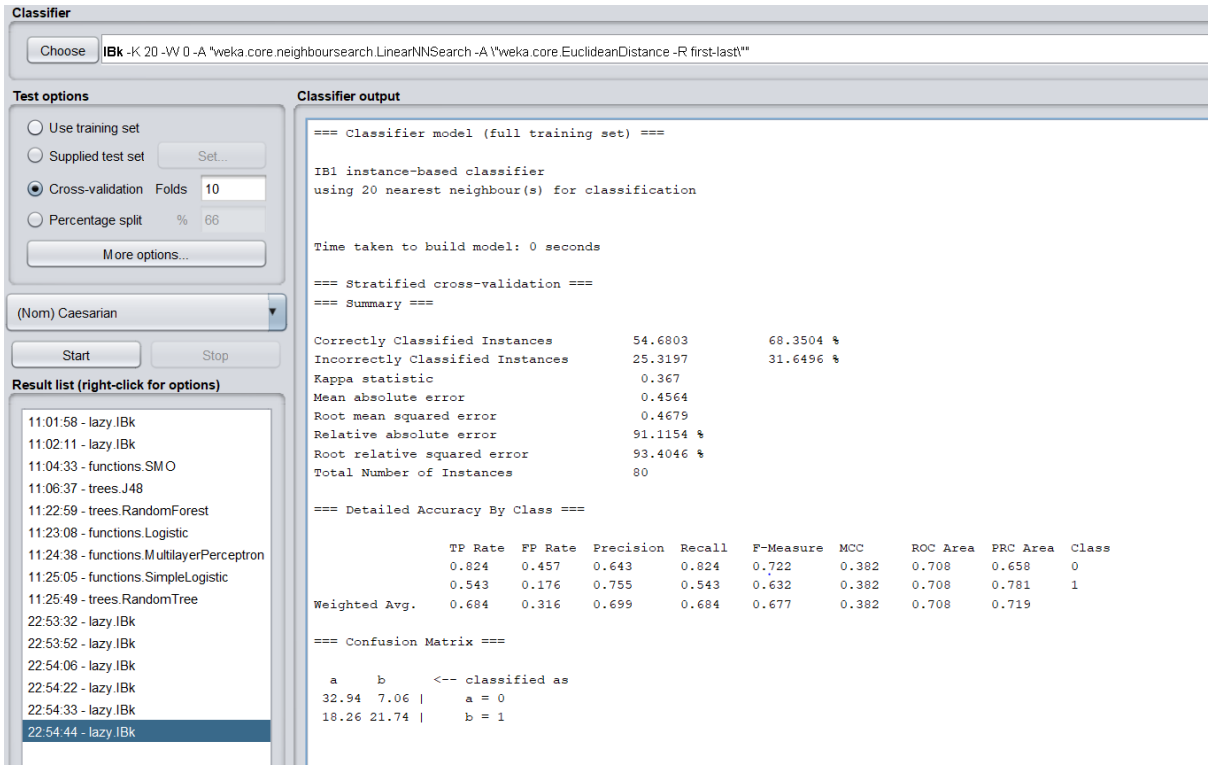
Classification Algorithms using WEKA

1. Caesarian Data set

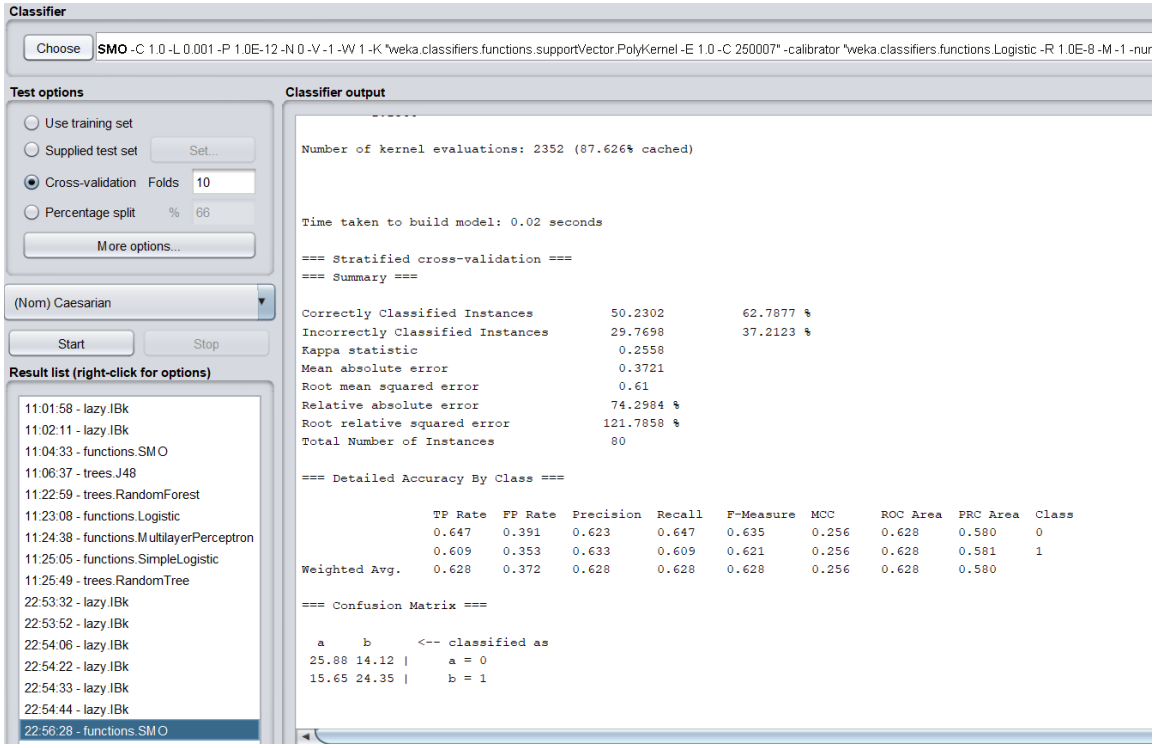
- Applied Class Balancer in the Pre-processing step since the classes were distributed randomly and to reduce the bias.
- KNN algorithm gives more efficient result and ANN was less efficient when compared to others.

K Nearest Neighbor Algorithm

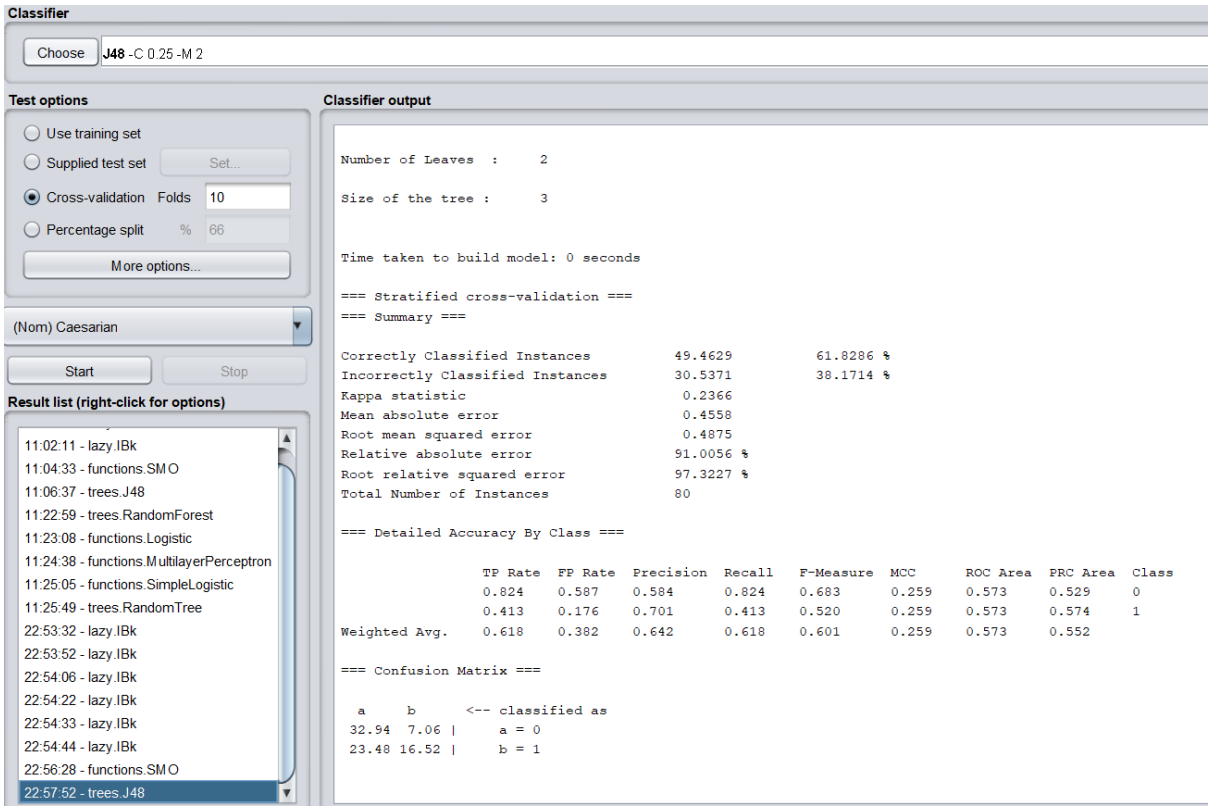
- When k=20, the results were more optimal.



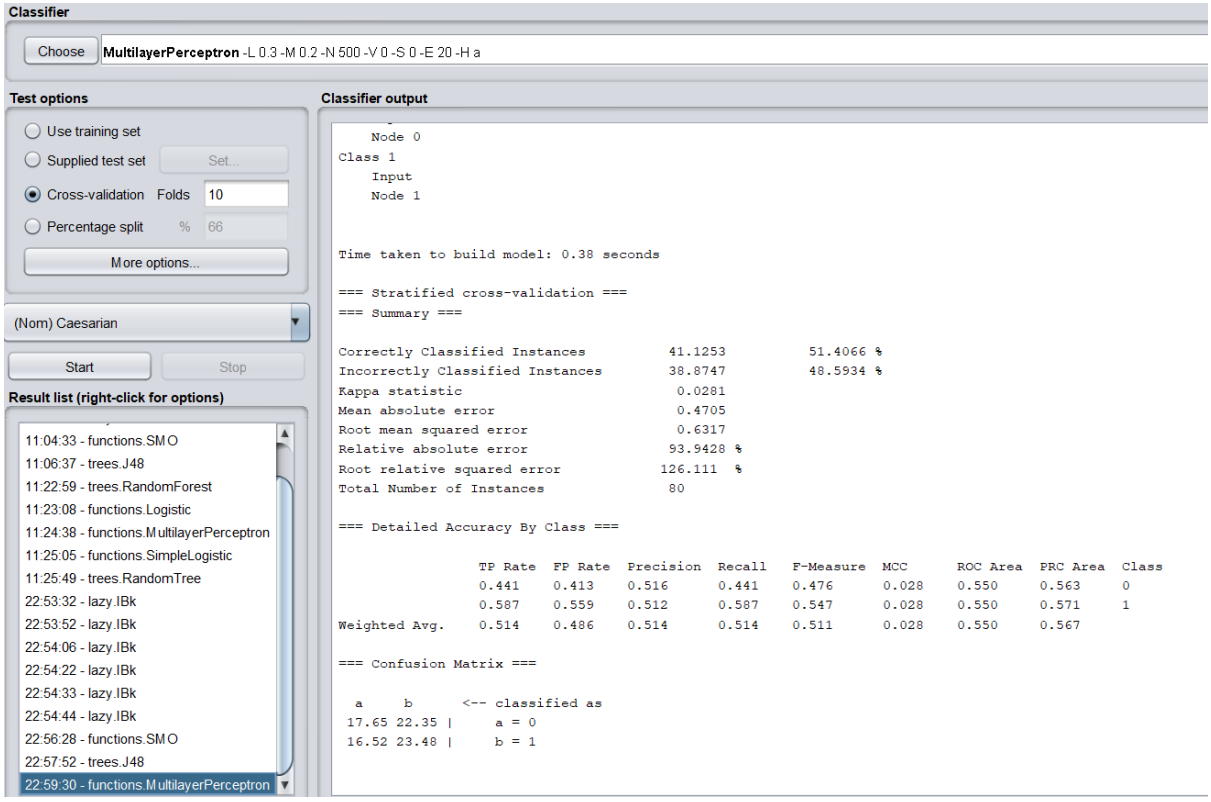
Support Vector Machine



Decision Tree



Artificial Neural Network

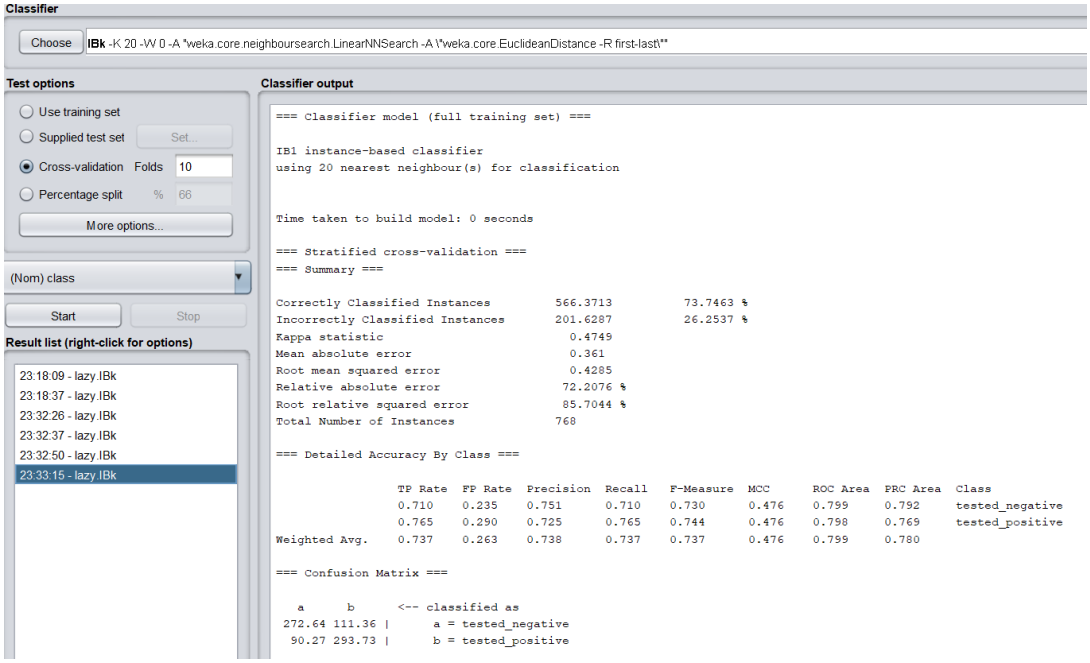


2. Diabetics Dataset

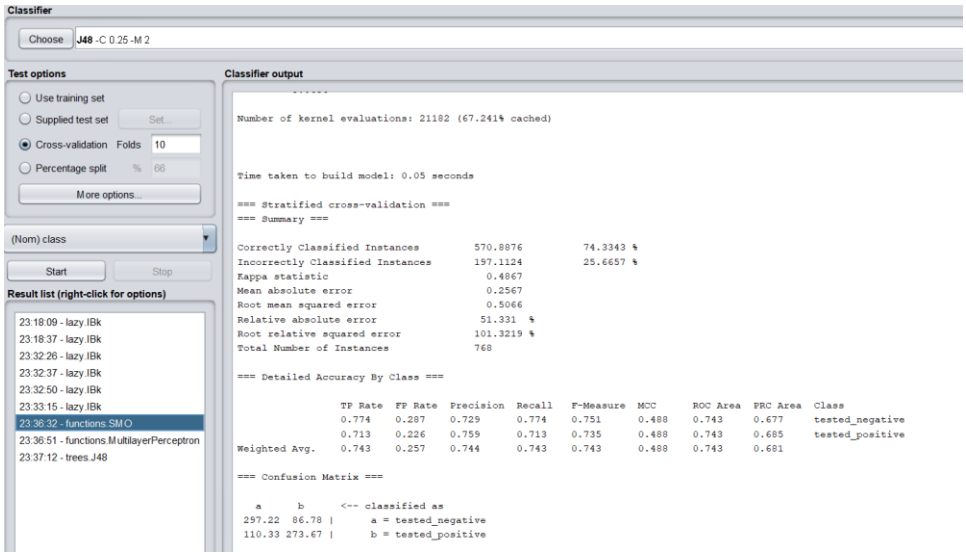
- Applied Class Balancer in the Pre-processing step since the classes were distributed randomly and to reduce the bias.
- SVM Algorithm gives more efficient and Decision Tree gives less efficient results when compared to others.

K Nearest Neighbor

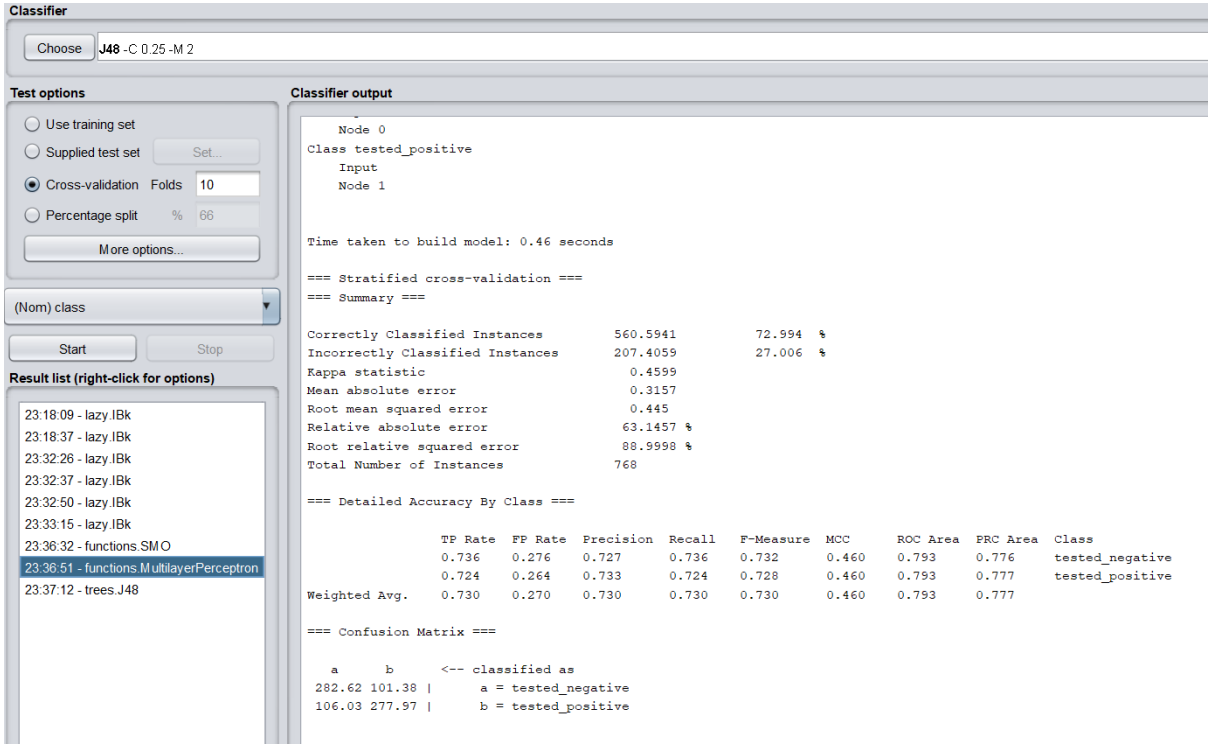
- When k=20, the results were more optimal.



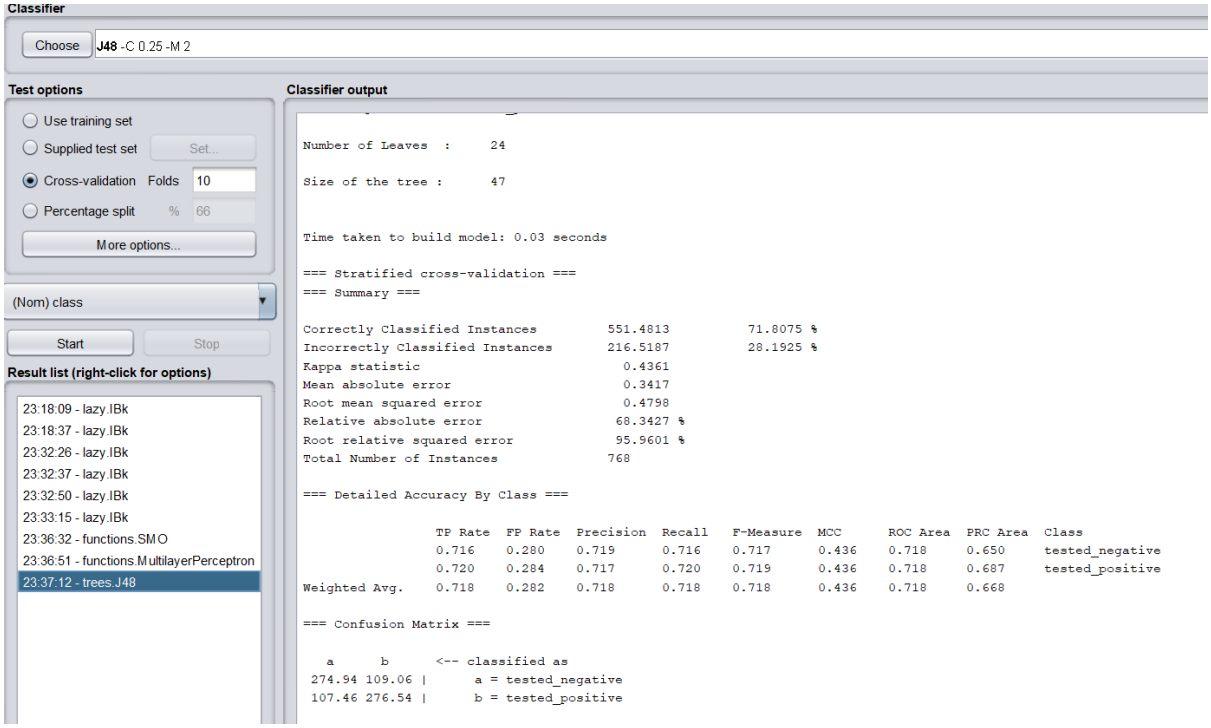
Support Vector Machine



Artificial Neural Network



Decision Tree

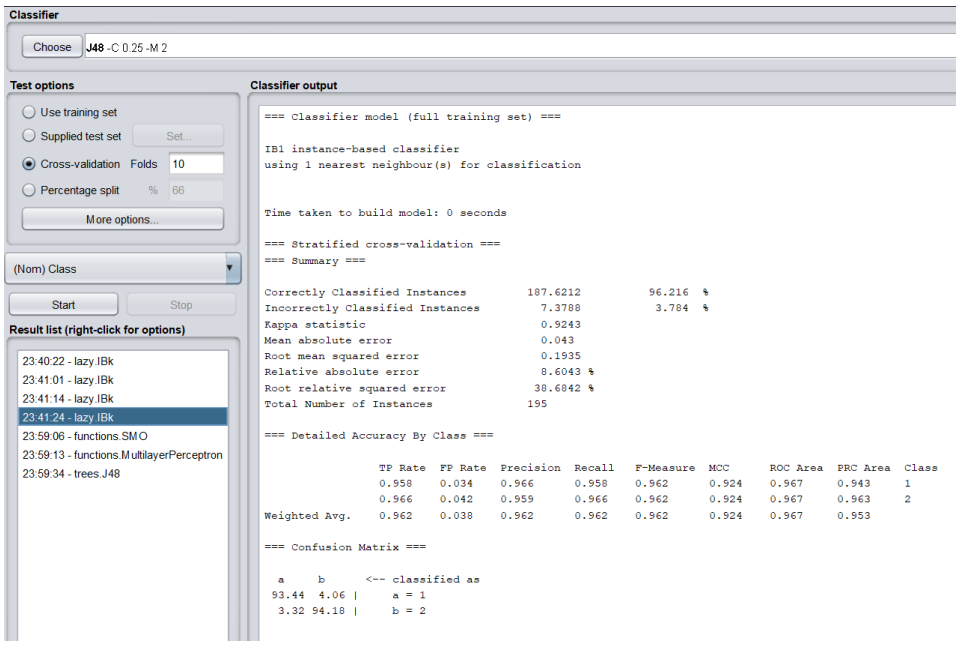


3. Heart Disease Dataset

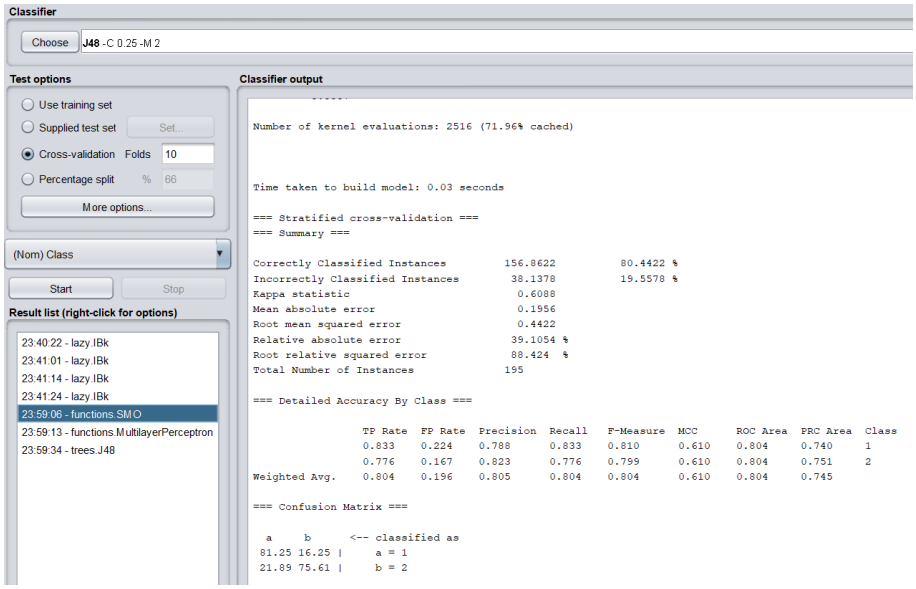
- Applied Class Balancer in the Pre-processing step since the classes were distributed randomly and to reduce the bias.
- KNN Algorithm given more efficient result and Decision Tree algorithm gives less efficient results when compared with others.

KNN

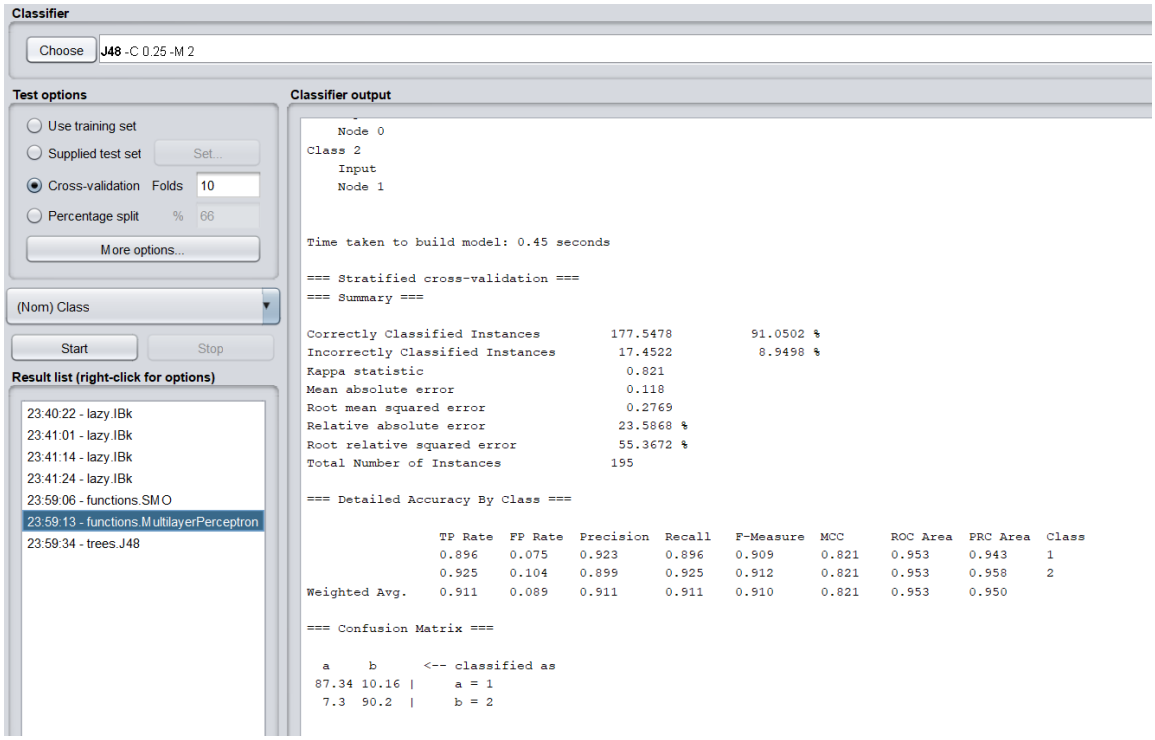
When k=1, the results were more optimal.



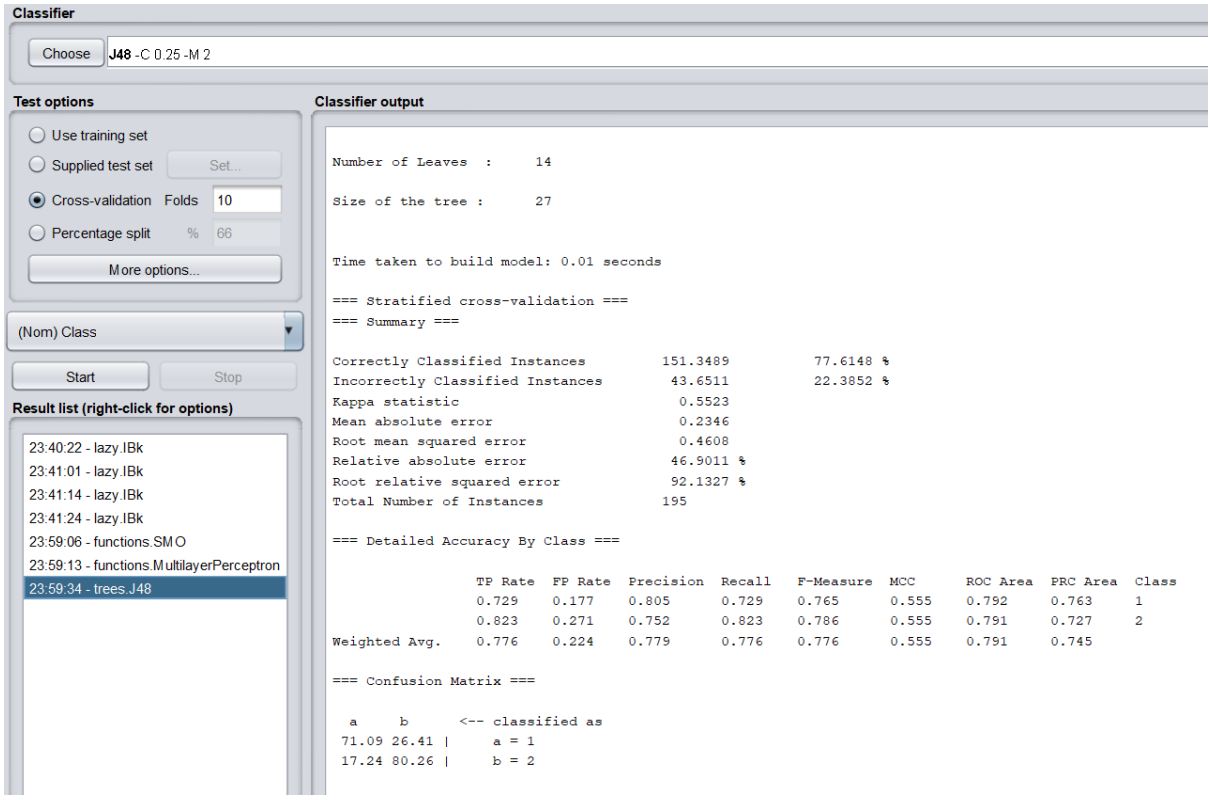
Support Vector Machine



Artificial Neural Network



Decision Tree

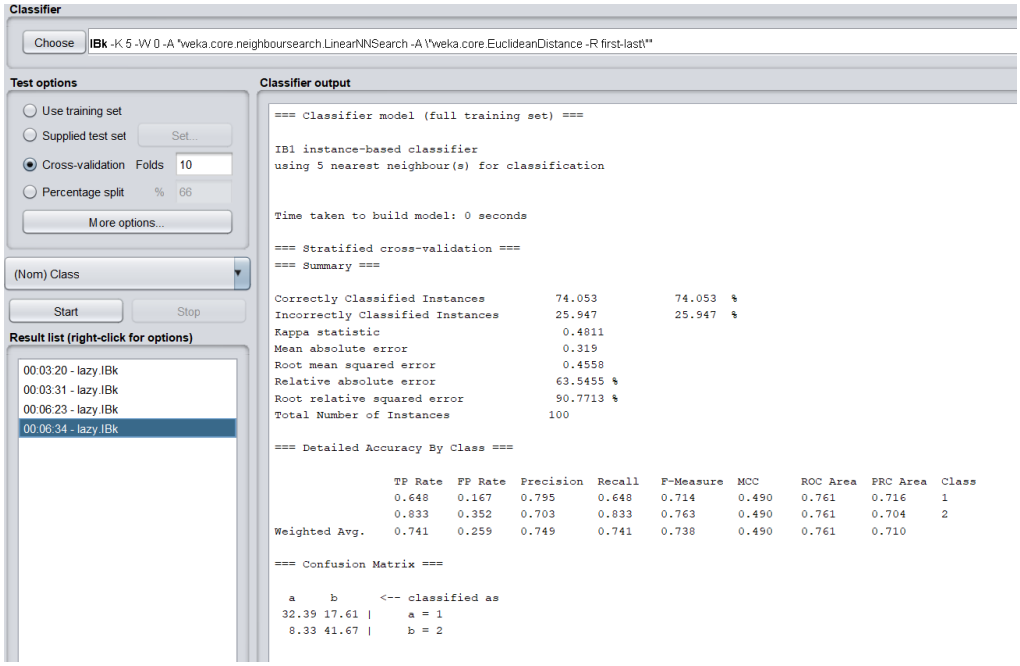


4. Fertility Dataset

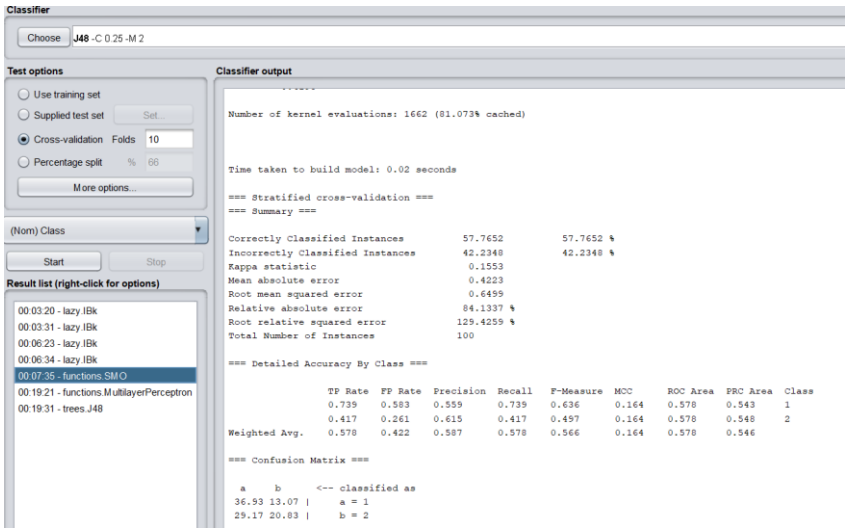
- Applied Class Balancer in the Pre-processing step since the classes were distributed randomly and to reduce the bias.
- KNN Algorithm shows more efficient result and ANN Algorithm gives less efficient results when compared with others.

K Nearest Neighbor

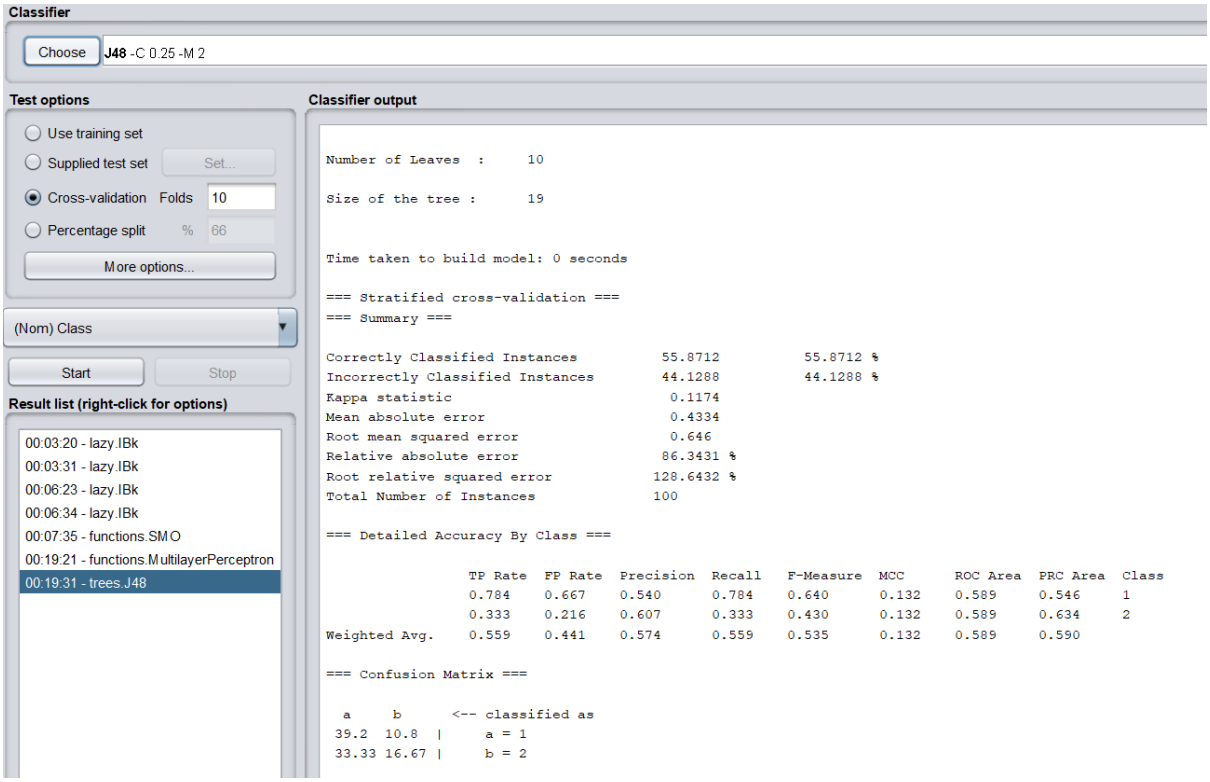
When k= 5, the results were more optimal.



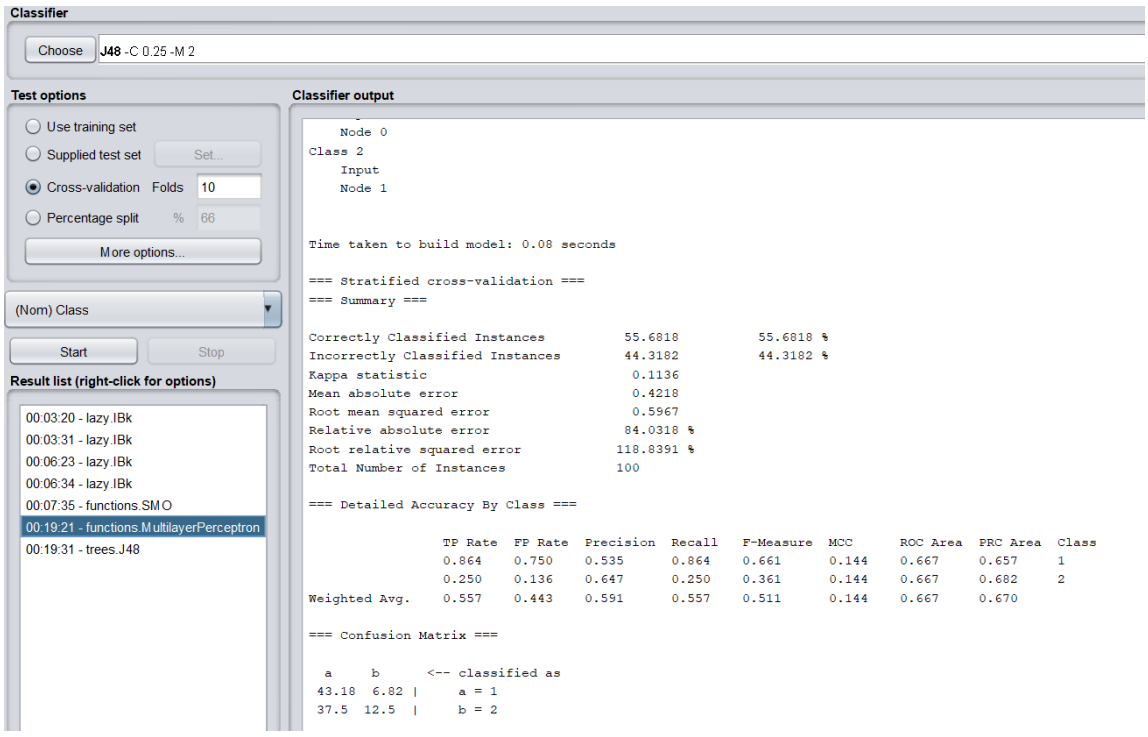
Support Vector Machine



Decision Tree



Artificial Neural Network

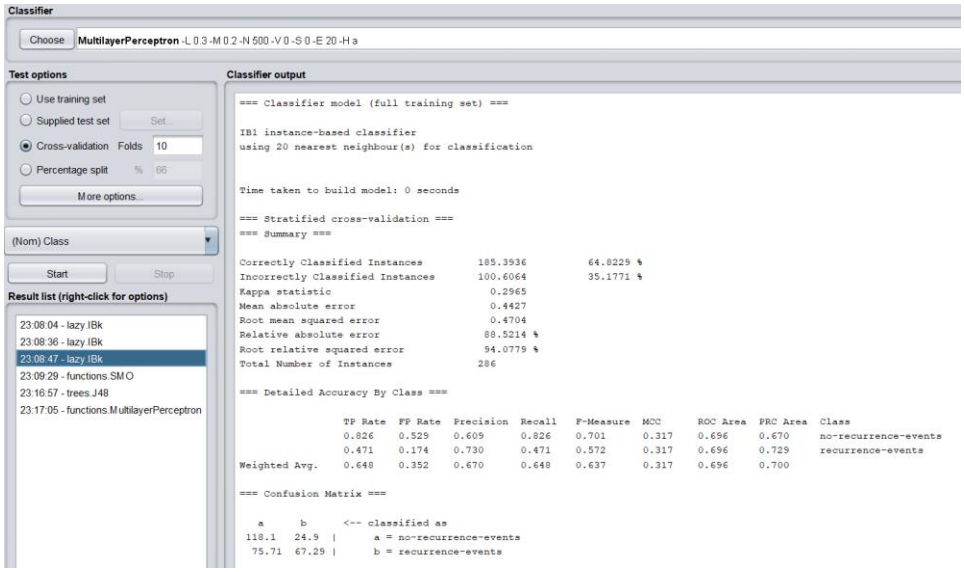


5. Breast Cancer Dataset

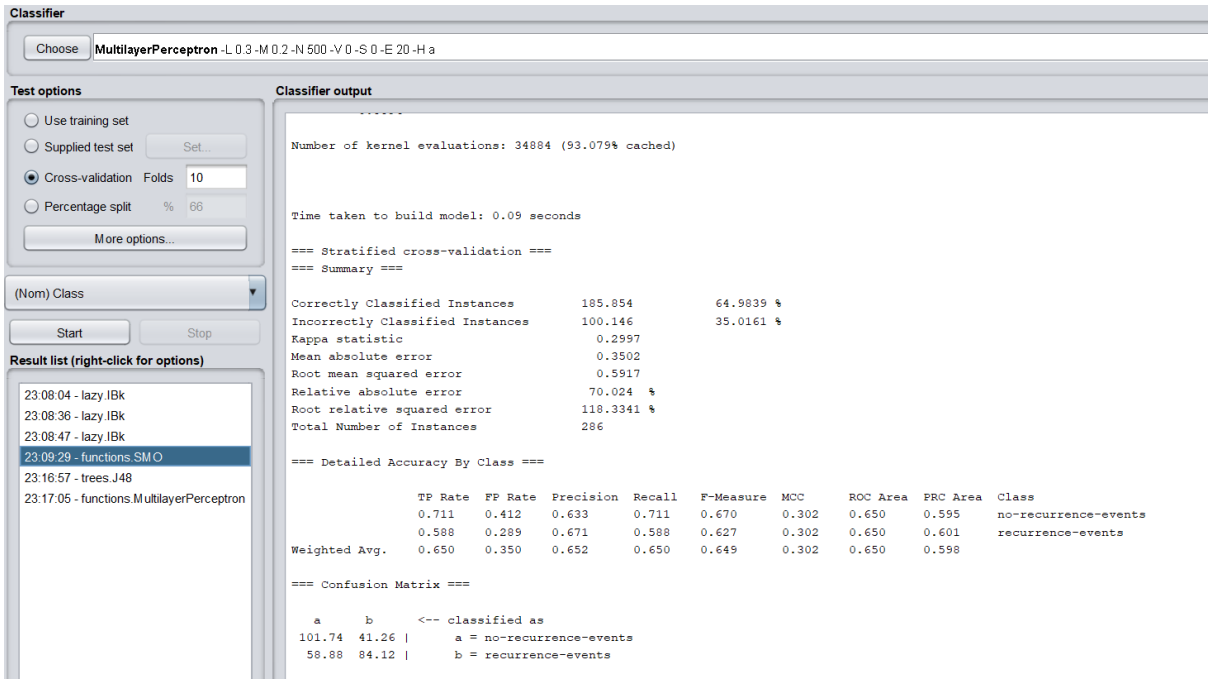
- Applied Class Balancer in the Pre-processing step since the classes were distributed randomly and to reduce the bias.
- SVM Algorithm is more efficient out of all and Decision Tree Algorithm is least efficient.

K Nearest Neighbor

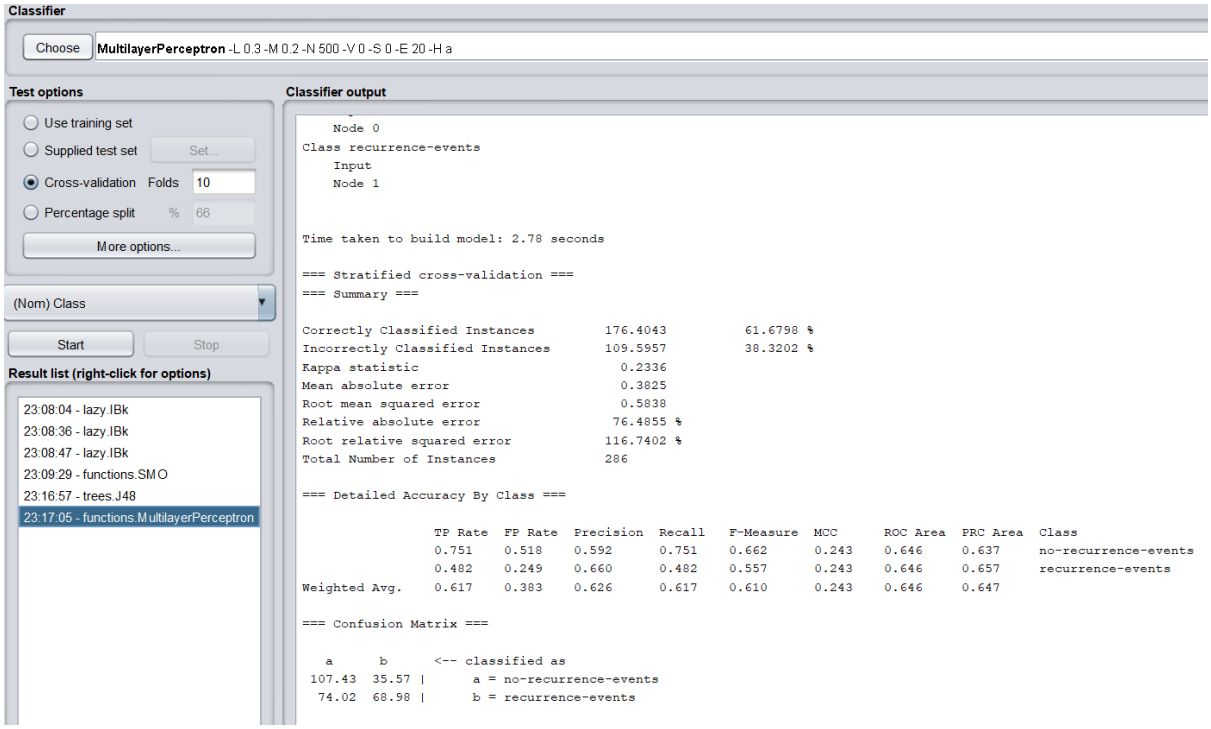
When k=20, the results were more optimal.



Support Vector Machine



Artificial Neural Network



Decision Tree