

# Comparativo

## Modelos de Clasificación

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# Matriz de confusión

```
[[62  6]
 [ 3 29]]
accuracy decision tree
0.91
```

```
Confusion Matrix SVM
[[66  2]
 [ 8 24]]
Accuracy
0.9
```

```
[[66  2]
 [18 14]]
accuracy Bayes:
0.8
```

```
Confusion Matrix
[[64  4]
 [ 3 29]]
Accuracy kernel
0.93
```

```
Random Forest
Confusion Matrix
[[63  5]
 [ 4 28]]
Accuracy
0.91
```

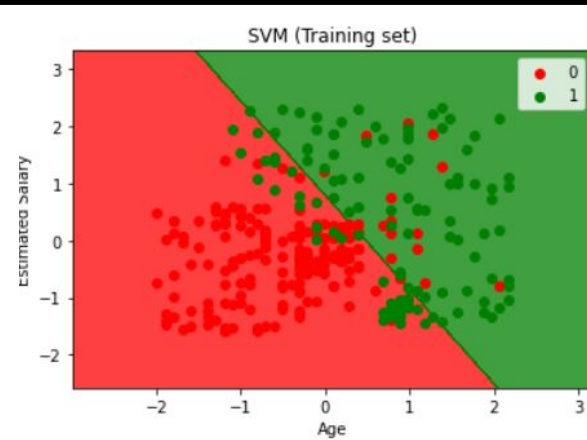
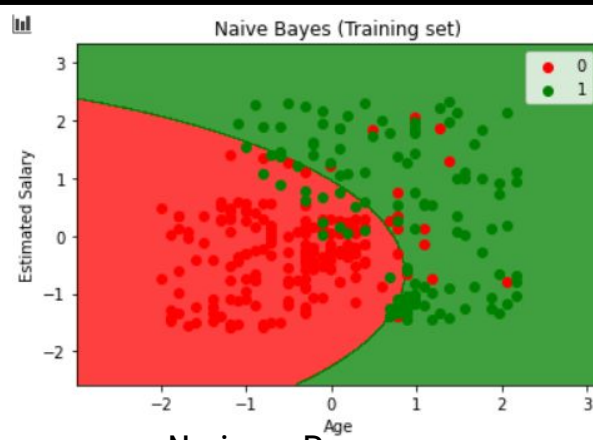
```
[[64  4]
 [ 3 29]]
accuracy KNN
0.74
```

```
[[65  3]
 [ 8 24]]
accuracy Linear regression
0.89
```

El mejor modelo para esta base de datos fue decision tree y random forest



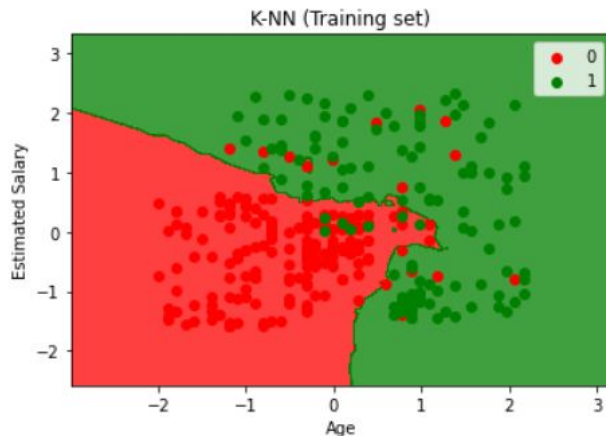
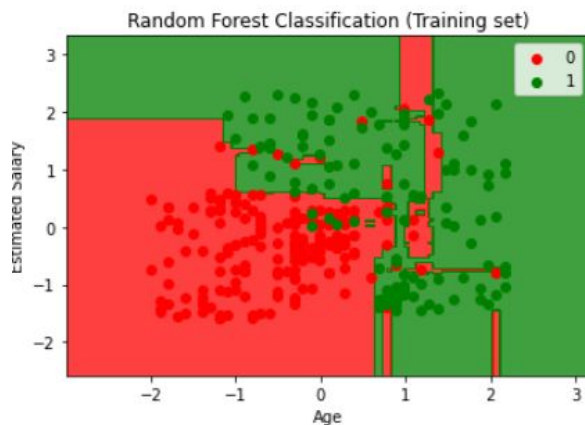
# Training set



Decision tree

Naive Bayes

SVM



Random Forest

KNN

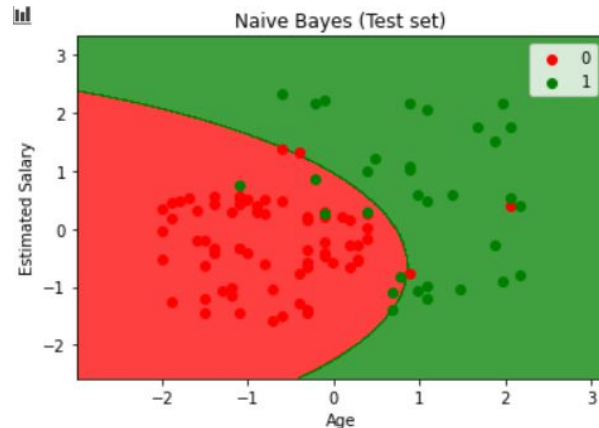
Logistic Regression



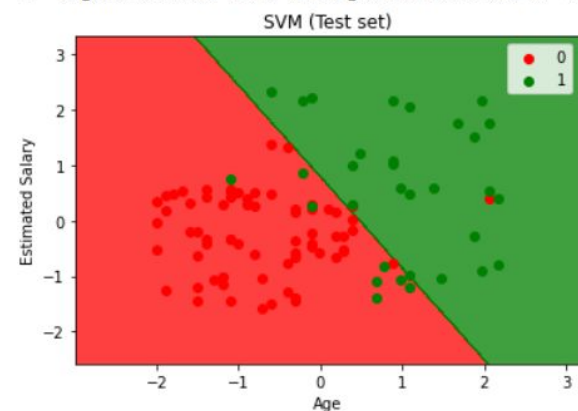
# Test set



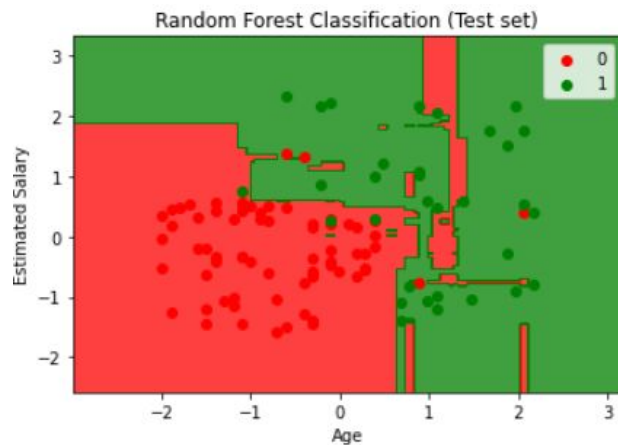
Decision tree



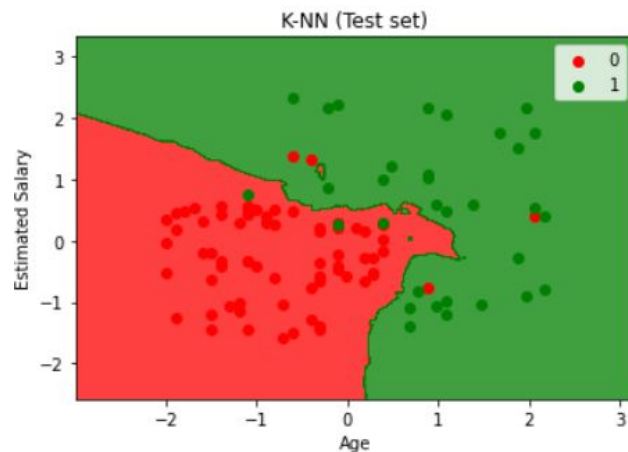
Naive Bayes



SVM



Random Forest



KNN



Logistic Regression





# Matriz de confusión

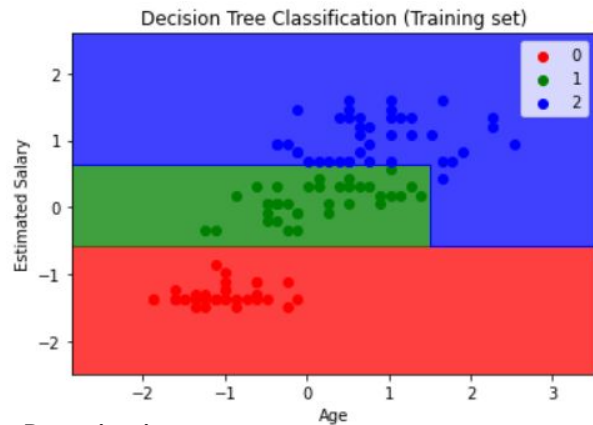
```
[[14  0  0]
 [ 0 13  1]
 [ 0  4  6]]
acurrancy:
0.868421052631579
```

Ya que se utilizó la librería scikit learn para todos los modelos, la matriz de confusión fue la misma en este dataframe, y de igual forma el cálculo de la exactitud. La exactitud fue relativamente buena con un 86.8%

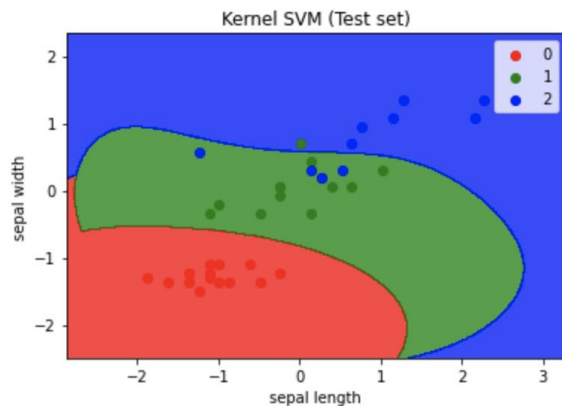


# Training set

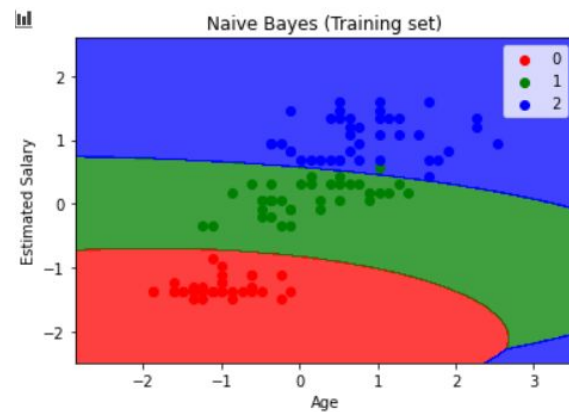
MLANIA.COM



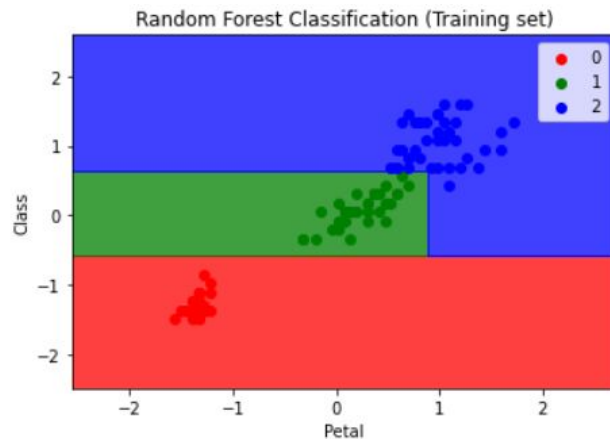
Decision tree



Kernel SVM



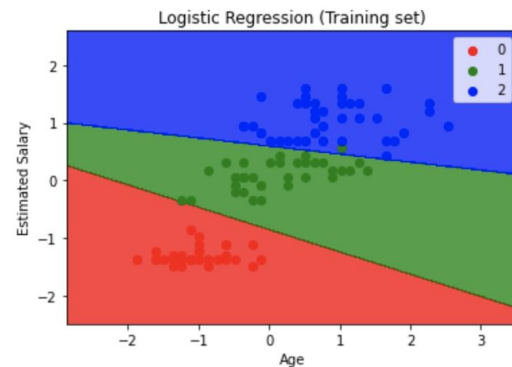
Naive Bayes



Random Forest



KNN



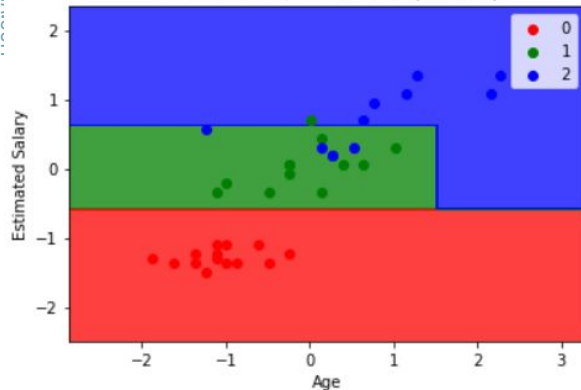
Logistic Regression





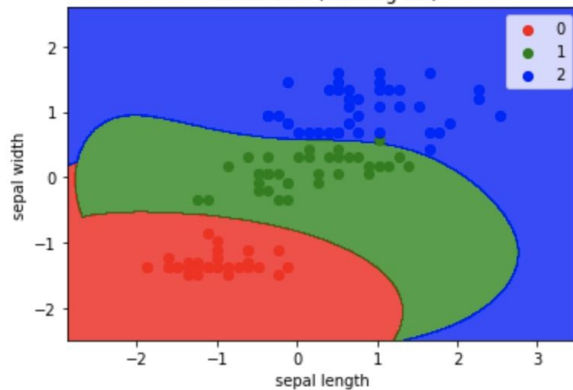
# Test set

Decision Tree Classification (Test set)



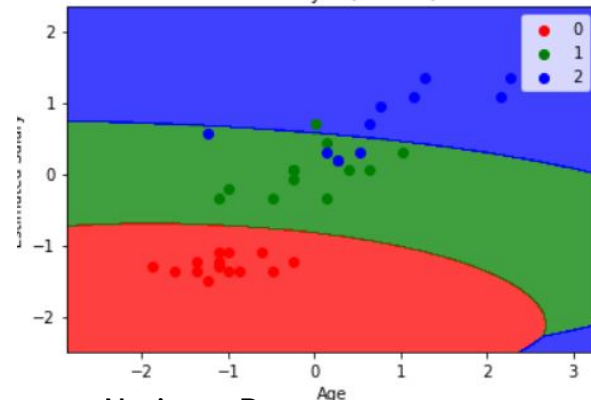
Decision tree

Kernel SVM (Training set)



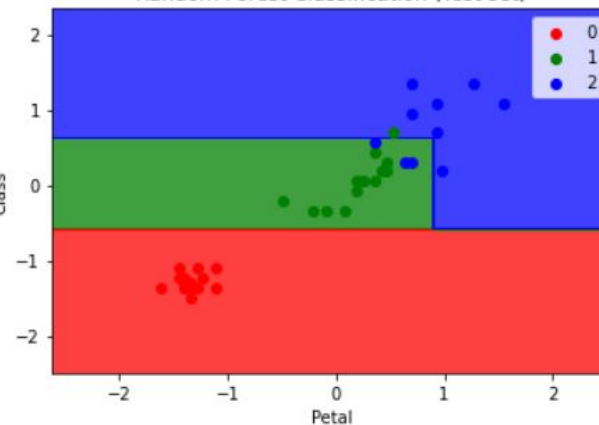
Kernel SVM

Naive Bayes (Test set)



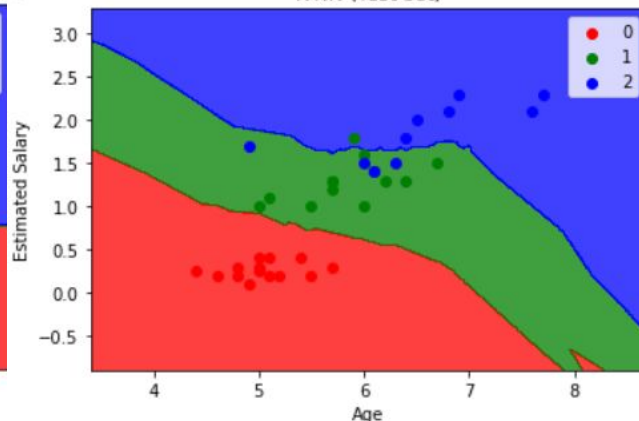
Naive Bayes

Random Forest Classification (Test set)



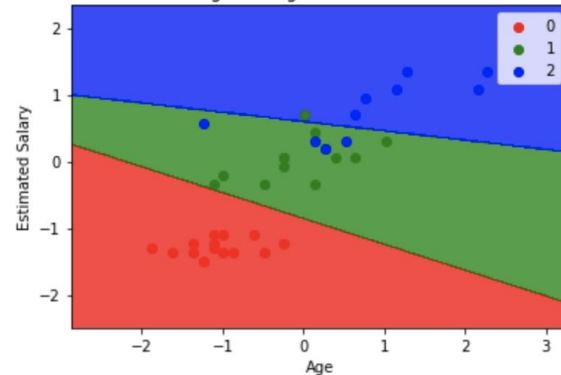
Random Forest

K-NN (Test set)



KNN

Logistic Regression (Test set)



Logistic Regression