# Neural network

A screenshot of a computer

Description automatically generated

Figure 40 EPOCs with 12 lost

A screenshot of a computer

Description automatically generated

Figure 200 EPOCs with low than 6

# Linear regression

A computer screen shot of a black and white screen

Description automatically generated

Figure Linear regression output

# Supported vector classifier

A screenshot of a computer

Description automatically generated

Figure output of the supported vector classifier

# Decision Tree Regressor

A screenshot of a computer

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Figure output of the Decision Tree Regressor

# Random Forest

A screenshot of a computer

Description automatically generated

Figure Output of Random forest

# Conclusion

After testing different models, the Decision Tree Regressor model is the model that performs the best with percentages of similarities usually ranging between 40% to 48%. The neural network has a similar percentage in the highest value, but the lowest value may be extremely low if the parameters are not well calculated - going as low as 25%.

The Random Forest has a constant performance of 39.47%, which is a not bad result either, but the results are constant as well. Therefore, it never improves. Finally, the Supported Vector Classifier model has not got good performance, as always provides 1 as the result of each match. Perhaps, because 1 is the most common result, so the model considers it will be right with more probability with all 1.

The linear Regression model does not provide an acceptable result, as it gives approximate numbers, when the result must be the exact numbers. The reason for this is that the numbers are a category value in this project.