**Advantages and Disadvantages of Random Forest Classifier**

1. It reduces overfitting in decision trees and helps to improve the accuracy
2. It is flexible to both classification and regression problems
3. It works well with both categorical and continuous values
4. It automates missing values present in the data
5. Normalising of data is not required as it uses a rule-based approach.

However, despite these advantages, a random forest algorithm also has some drawbacks.

1. It requires much computational power as well as resources as it builds numerous trees to combine their outputs.
2. It also requires much time for training as it combines a lot of decision trees to determine the class.
3. Due to the ensemble of decision trees, it also suffers interpretability and fails to determine the significance of each variable.

# Using common evaluation matrix to evaluate the classifier used, to get even more insight into model performance.

From the confusion matrix it the obvious the classifier performed excellently.

With 100% accuracy

**Precision** is the number of correctly identified members of a class divided by all the times the model predicted that class.

**Recall** is the number of members of a class that the classifier identified correctly divided by the total number of members in that class

**F1 score** is a little less intuitive because it combines precision and recall into one metric. If precision and recall are both high, F1 will be high, too. If they are both low, F1 will be low. If one is high and the other low, F1 will be low. F1 is a quick way to tell whether the classifier is good at identifying members of a class, or if it is finding shortcuts (e.g., just identifying everything as a member of a large class).