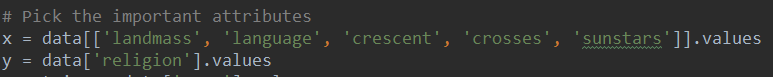
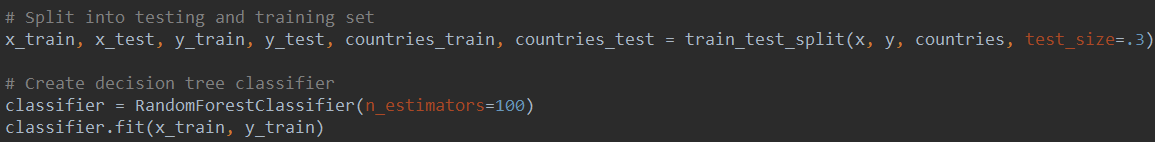
Introduction

For this project, we used the flags dataset taken from UC Irvine, to try and predict a country’s religion based on the attributes of its flag. To achieve this, we used a KNN classifier to differentiate between Christian, Islamic and Other religions, and random forests to compare its results.

Description

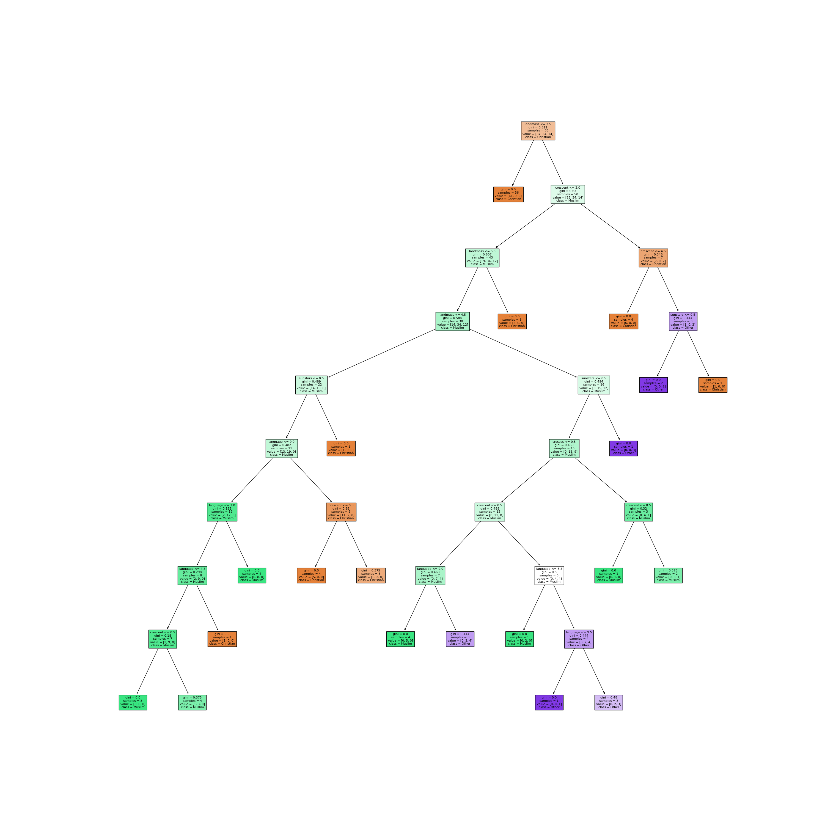
Algorithm and Implementation

KNN STUFF FIRST. We decided to implement random forests to compare our results from the KNN classifier with. The sklearn, matplotlib, numpy and pandas libraries were used for this part of the project. For the random forest algorithm, we decided to create 100 decision trees using the landmass and languages features from the KNN classifier along with the crescent, crosses and sun stars features. These additional features were chosen by looking at common religious symbols for each religion across many different countries. 

We then split the data using 70% for training, and the remaining 30% for testing. 

Results and Conclusions

 Looking at the results of the random forests algorithm, the accuracy averages around 85%.

With this accuracy, we can see that most of the test cases were classified correctly, meaning that the features do a good job of predicting religion. IDK WHAT ELSE TO WRITE

Team Contribution

Raymond wrote the code and project report sections for random forests.

References and Citations