I learned quite a bit from this lab. I learned about data preparation and where to load it. Once I loaded it in I selected three classes to simplify the classification task. Since SVMs work best with lower-dimensional data, the images were grayscale and flattered. This made them less complex on the computer while keeping the important texture info. It was also split into training and testing sets to ensure it was effective. While training the model it involved experimenting with different kernel functions. The RBF showed the best results because it could handle the non linearity better than the simple kernel. One challenge I did face was seeing that the SVMs are not as efficient for higher datasets. It reduced the image dimensions and selecting a subset of classes helped mitigate this issue. Also looking at how different parameters influenced the performance, requiring multiple trials to optimize. This lab helped me learn more about classical machine learning techniques for image classification. While SVms are effective for smaller datasets I learned that bigger deep learning models would be better off for the larger datasets. The experience helped me learn the strengths and limits of SVMs in practical use.