## Reflection

We used a pre trained deep learning model called VGG16 to see how it works. The main goal was to understand how deep learning models process images, from data preparation to making predictions. I got to interact with the VGG16 model and look at its structure. It has different layers that help process images step by step. Seeing how the model works made me realize how powerful deep learning is for recognizing images. Before using images in deep learning, they need to be prepared. This includes resizing, normalizing, and formatting them properly. I learned that preprocessing is super important because it helps the model understand images better and make more accurate predictions. Uploading an image and watching the model make predictions was really cool. The model looked at the image and assigned different probabilities to possible labels. This showed me how AI can identify objects, but also how it depends on good data. We experimented with making small changes to images, like rotating them or adding noise. I noticed that even tiny changes could confuse the model, making it give different results. This helped me understand how AI models rely on specific details in images. This lab gave me a better understanding of deep learning and how AI can classify images. I saw how important data preparation is and how pre-trained models can be useful without needing to build one from scratch. The lab was well-organized and easy to follow. The interactive parts made it fun to learn. I think it would have been helpful to get a little more explanation on how different layers of the model work, but overall, it was a great way to learn the basics of deep learning.