Overall, the first object detection method, YOLO, was quick to analyze an image and determine the objects. However, its average confidence for all images was quite low. RCNN, on the other hand, took much longer to run through each object, performing about 8x slower than YOLO. In compensation, RCNN had a much better average confidence for each image. YOLO also detected fewer objects than RCNN, and was much worse at identifying objects in a messy environment like the school classroom.

For part ii, I did a simple analysis of the image content, giving pixel data and byte amount for each image. I also found code for a frequency domain analysis, which finds the rate at which pixel values change across the image. This is useful for file compression and finding where to best reduce information to preserve the image with lower byte value

https://github.com/mpeberhart/TakeHomeAssignment/tree/main