I successfully completed my assignment and all three parts ran without error and produced the correct results. Part I involved writing a research paper on Deep Learning, Part II documented GitHub functionality, and Part III required duplicating and testing two neural network programs from Joseph Lee Wei En's repository. Both programs executed successfully: the house price prediction model achieved eighty-six percent accuracy and the CIFAR-10 CNN achieved seventy-seven percent accuracy with all expected visualizations and saved models generated.

I spent approximately twelve to fifteen hours completing this assignment from beginning to end. Parts I and II took about four and a half hours combined for research and writing. Part III consumed eight to ten hours including environment setup, understanding the code, running both programs with the CIFAR-10 taking sixty minutes to train, and creating proper documentation with attribution.

This assignment was challenging because I had to work with complex deep learning frameworks and understand neural network architectures that were completely new to me. Setting up TensorFlow and resolving dependency conflicts between package versions required significant troubleshooting. Understanding convolutional layers, backpropagation through multiple layers, and proper data preprocessing techniques like normalization and one-hot encoding was conceptually difficult.

I wrote the program by myself following the structure from Joseph Lee Wei En's original repository. I used Google extensively for TensorFlow documentation, Keras API references, and Stack Overflow discussions when encountering installation errors. I also watched YouTube tutorials to better understand CNN architecture and convolutional operations on image data.

The main obstacle was resolving TensorFlow installation errors due to Python version incompatibility, which I solved by creating a virtual environment with Python three point nine. I used Google to understand why my CIFAR-10 accuracy plateaued at seventy percent, learning this is normal for basic CNNs without data augmentation. Another challenge was ensuring proper attribution and professional GitHub documentation, which I resolved by researching best practices for README files and code comments.

I learned how powerful deep learning frameworks like TensorFlow and Keras are for building complex neural networks with relatively simple code. I now understand the fundamental differences between regular neural networks and CNNs, particularly how CNNs use spatial feature extraction for image processing. This assignment helped me grasp the complete machine learning pipeline and gave me valuable experience with GitHub version control and professional code documentation practices.

There is no further information I would like to share with you.