# Problem 1

a. Compare the average loss of the two models. Provide an explanation for what you observe.

My 1-Layer NN Average Training Loss was 0.5414, while my 2-Layer NN Average Training Loss was 0.4623. By adding a second layer we are able to lower the loss by reflecting more patterns in the data using non-linearities (as opposed to 1-Layer which is only linear regression).

b. Comment on your parameter choices. These include the learning rate, the hidden layer size and the number of epochs for training.

The only parameter that I changed from its default was the number of epochs (from 25 to 30). This change helped me meet the training loss target. I left the learning rate parameter as 0.01 and the hidden layer size as 10. However, I could have continued to increase the number of epochs, used a smaller learning rate, or implemented a larger hidden layer to reduce my loss.