**Neural Network Analysis**

**Overview**

The purpose of this analysis is to evaluate whether the non-profit foundation Alphabet Soup would fund applicants.

**Results**

* Data Preprocessing
  + IS\_SUCCESSFUL is the variable target.
  + IS\_SUCCESSFUL is also the feature variable.
  + I removed the "EIN" and "NAME" columns from the model due to them not being features or targets. I added the “NAME” column into the model in the optimized notebook file to improve the accuracy of the model.

**Compiling, Training, and Evaluating the Model**

* How many neurons, layers, and activation functions did you select for your neural network model, and why?
  + I had 8 neurons, 2 layers for the first layer and 6 neurons for the second layer. The activation function was relu. These were chosen since they best looked to be a determination of accuracy.
* Were you able to achieve target model performance?
  + No but I got close. The target was 75% and I was able to achieve 73%.
* What steps did I take to increase the model performance?
  + I did a combination of different layers, neurons, and activation functions to attempt to increase accuracy. I ran multiple iterations of the process.

**Summary**

* Summarize the overall results of the deep learning model. Include a recommendation for how a different model could solve this classification problem, and then explain your recommendation.
  + The final model with optimization had an accuracy score of 73%. I would recommend this model even if I did not achieve the results I targeted. I suggest filtering the data better and adding more input features like I did with the Name column to improve the accuracy score.