Neural Network Model Report

1. **Overview** of the analysis: Explain the purpose of this analysis.
2. **Results**: Using bulleted lists and images to support your answers, address the following questions:

* Data Preprocessing
  + What variable(s) are the target(s) for your model?
    - The target variable for the model was the “IS\_SUCCESSFUL” column
  + What variable(s) are the features for your model?
    - The feature variables for the model are: APPLICATION\_TYPE AFFILIATION CLASSIFICATION USE\_CASE ORGANIZATION STATUS INCOME\_AMT SPECIAL\_CONSIDERATIONS ASK\_AMT
  + What variable(s) should be removed from the input data because they are neither targets nor features?
    - The removed variables were ‘EIN’ and ‘NAME’ as they were not needed targets for this 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 used 2 hidden layers, the first one had 80 units and the second one had 30.
  + Were you able to achieve the target model performance?
    - I was not able to pass the target model performance of 75%
  + What steps did you take in your attempts to increase model performance?
    - I tried to add different amounts of units in the hidden layers. I also tried to change up the activations.

1. **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 overall results of the deep learning model was about 73% for the starter code, as well as my attempt in AlphabetSoupCharity\_Optimization. I recommend with a different model to change the input and output to see if there is a higher prediction accuracy.