Overview

The goal of this assignment was to create a binary classification model using deep learning to predict whether organizations applying for funding through Alphabet Soup would be successful. The analysis involved cleaning and preprocessing real-world data, converting categorical variables, scaling features, and building a neural network using TensorFlow.. This model could help the organization prioritize applications with the highest chance of success, making their funding process more efficient and data-driven.

Results:

Data Preprocessing

- **Target:** Successful
- **Features:** All other columns after cleaning and encoding
- **Removed:** Non-useful identifiers

Model Design

- **Structure:**
    - 2 hidden layers (80 and 30 neurons, ReLU)
    - Output layer: 1 neuron, Sigmoid
- **Accuracy:** 67
- **Loss:** 84
- **Improvements Tried:** Data cleaning, dummy encoding, scaling, adjusting layer sizes

The model achieved ~67% accuracy.