Project requirements:

* **Assignment must be turned in as a Jupyter Notebook with comments documenting processes as necessary**
* **Data is scaled where appropriate:**
  + Semantic data is already transofmred
  + Phonological data: I would like to learn how to create a vector of 0s and 1s with each row or column delineating the sounds provided in Table 1.
  + Then, each word can be constructed by a series of 0s and 1s.
* **Data is transformed appropriately:** 
  + See above
* **Missing values are correctly dealt with:** 
  + I have excluded missing words from the analyses and am prepared to answer this question. No help required.
* **Selected appropriate algorithms for the model**
  + Bidirectional neural network with 2 recurrent loops (See figure 1).
* **Tried at least 2 approaches:**
  + I would like to learn how to create the network with the two forms of semantic input I created in the Jupyter Notebook.
    - similarity matrix and word embeddings
* **Models are appropriately validated**
  + Train model with 80% of the data, test on remaining 20%
  + Learn to plot loss function: I think I can do this, but the code for that is:

**for** epoch **in** range(num\_epochs):

running\_loss = 0.0

**for** i, data **in** enumerate(trainloader, 0):

running\_loss =+ loss.item() \* images.size(0)

loss\_values.append(running\_loss / len(train\_dataset))

plt.plot(loss\_values)