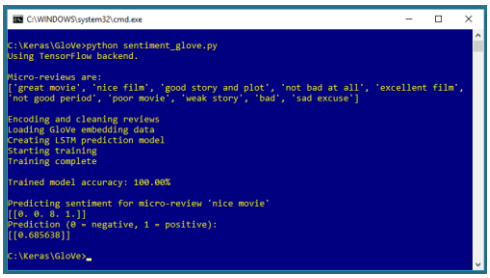
Predictive Analytics World / Deep Learning World
Exercises - GloVe Embeddings

1. Locate and download the GloVe embedding data, in particular, file glove.6B.100d.txt based on 2014 Wikipedia text. Write a Python program that sets up 10 hard-coded micro reviews (four words max length each, five positive and five negative) and creates a sentiment analysis model based on the GloVe embeddings. For example:



2. Modify your program for multi-class analysis where negative = (1,0,0), neural = (0,1,0), positive = (0,0,1). Increase the max length of the micro reviews to five or six, and add five hard-coded neutral micro-reviews to the training data.

3. Which statement is most accurate?

a.) Using global embeddings like GloVe is most appropriate when creating NLP prediction systems for domain-specific problems, such as legal text, or medical text.
b.) Using global embeddings like GloVe is most appropriate when creating NLP prediction systems for generic problems, such as systems like Apple Siri or Amazon Alexa.
c.) Using global embeddings like GloVe is most appropriate for initializing the weights of an embedding layer.

4. Which statement is most accurate?

a.) The Keras Tokenizer fit() method encodes words according to order of first appearance.
b.) The Keras Tokenizer fit() method encodes words according to their frequency.
c.) The Keras Tokenizer fit() method encodes words randomly, controlled by NumPy random class.

5. Which statement is most accurate?

a.) In general, most NLP neural systems, including Keras Tokenizer, use 0 for padding.
b.) In general, most NLP neural systems, including Keras Tokenizer, use 0 for out-of-vocabulary.
c.) In general, most NLP neural systems, including Keras Tokenizer, use 0 for stop-words.

6. Which statement is most accurate?

a.) In general, most NLP neural systems by default place padding at the beginning of a sentence.
b.) In general, most NLP neural systems by default place padding at the end of a sentence.
c.) In general, most NLP neural systems place half of padding at beginning, half at end of a sentence.