Your grade: 100%

Your latest: **100%** • Your highest: **100%** • To pass you need at least 80%. We keep your highest score.

Next item →

1. In natural language processing, predicting the next item in a sequence is a classification problem. Therefore, after creating inputs and labels from the subphrases, we one-hot encode the labels. What function do we use to create one-hot encoded arrays of the labels? **1 / 1 point**

- ○ tf.keras.preprocessing.text.one_hot
- ○ tf.keras.utils.SequenceEnqueuer
- ◉ tf.keras.utils.to_categorical
- ○ tf.keras.utils.img_to_array

Correct
Nailed it!

2. What is a major drawback of word-based training for text generation instead of character-based generation? **1 / 1 point**

- ◉ Because there are far more words in a typical corpus than characters, it is much more memory intensive
- ○ Word based generation is more accurate because there is a larger body of words to draw from
- ○ There is no major drawback, it's always better to do word-based training
- ○ Character based generation is more accurate because there are less characters to predict

Correct
Correct!

3. What are the critical steps in preparing the input sequences for the prediction model? **1 / 1 point**

- ☐ Splitting the dataset into training and testing sentences.
- ☑ Pre-padding the subphrases sequences.

Correct
You've got it!

- ☑ Generating subphrases from each line using n_gram_sequences.

Correct
Keep it up!

- ☐ Converting the seed text to a token sequence using texts_to_sequences.

4. When predicting words to generate poetry, the more words predicted the more likely it will end up gibberish. Why? **1 / 1 point**

- ○ Because the probability of prediction compounds, and thus increases overall
- ◉ Because the probability that each word matches an existing phrase goes down the more words you create
- ○ Because you are more likely to hit words not in the training set
- ○ It doesn't, the likelihood of gibberish doesn't change

Correct
That's right!

5. True or False: When building the model, we use a sigmoid activated Dense output layer with one neuron per word that lights up when we predict a given word. **1 / 1 point**

- ◉ False
- ○ True

Correct
Absolutely!