Thursday Oct 3, 2024

Name:

Discuss and complete the following questions with the person nearest you. You **may** be asked to share your thoughts with the class.

1. What is your favorite color?

2. Recall, perplexity is expressed as:

$$PPL(w_1...w_n) := 2^{\frac{1}{N}\sum_{i=1}^{N}\log_2 P(w_i|w_0...w_{i-1})}$$

Assume you have a model which assigns the following probabilities:

Bigram	Log2 Prob
\<s\> I	-2.32
I love	-3.30
love other	-6.64
other animals	-0.15
animals \</s\>	-1.32

Figure 1: Bigrams Probabilities

What is the perplexity of your model on a test dataset which contains only the sentence: "I love other animals" ?