BUS 243 Name:

Quiz 1.

Problem 1. What does a one-hot vector represent?

Problem 2. What is one-hot vector representation in NLP? Choose the one correct statement.

a) A binary vector with a single "1" indicating the presence of a particular word in a vocabulary

b) A vector with real-valued entries indicating the frequency of a particular word in a vocabulary

c) A vector with real-valued entries indicating the likelihood of a particular word appearing in a vocabulary

d) A binary vector with multiple "1"s indicating the presence of multiple words in a vocabulary

Problem 3. What is a bag-of-words representation in NLP? Choose the one correct statement.

a) A binary vector with a single "1" indicating the presence of a particular word in a vocabulary

b) A vector with real-valued entries indicating the frequency of a particular word in a vocabulary

c) A vector with real-valued entries indicating the likelihood of a particular word appearing in a vocabulary

d) A binary vector with multiple "1"s indicating the presence of multiple words in a vocabulary

Problem 4. What is the main difference between a one-hot vector representation and a bag-of-words representation in NLP?