

Q1. BoW is a basic way of representing text where each word is considered a unique feature, indicating whether it appears or not in the text. GloVe embeddings represent words as vectors in a high-dimensional space, capturing the meaning and relationship between words. Taking the average of these embeddings for a movie review results in a dense vector that summarizes the review. BoW is straightforward, but doesn't capture meaning. Averaged GloVe does capture meaning but requires more resources. The choice will depend on the specific NLP task and what resources are available.

Q3. The answer is correct, but it lacks detail on how self-attention mechanisms help in NLP. Self-attention creates a new vector representation for each element by taking into account the other elements in the current time step. This new representation is indicative of the element's relevance in the current context. To do this, self-attention uses query, key, and value weights to create new vector representations, compares them with weighted averages, and then recombines them into a single vector that is the same size as the original element.