# Module 3
## Reading and Short Answer Assignment

Assigned: Wednesday, 05/29/2024
Due: Wednesday, 06/05/2024 by 11:59:59 PM

This week your assignment is to watch the Computerphile video on Word2Vec:
https://youtu.be/gQddtTdmG_8?si=MVk4-4OAhxKObt8c

and read the following article on sinusoidal positional encodings:
https://machinelearningmastery.com/a-gentle-introduction-to-positional-encoding-in-transformer-models-part-1/

## Questions
Please write a short response (4-5 sentences / short paragraph) to each of the following questions / the following question. Your responses will be graded for accuracy, critical thinking, and clarity. You may use any common word processing or text format. Please upload your answers by the due date.

**Question 1:** In the readings we see an old version of a positional encoding (sine function) and an even older version of word embeddings (word2vec). What are the pros and cons of learning these embeddings directly as opposed to a pre-defined/pre-learned embedding as described in the readings?