

In question 1, I went to the stage where I created the embedding variable but was unable to run my model due to constant errors that I could not diagnose. Each word has been converted to a vector and can be viewed as one. A reversed dictionary was also created for the purpose of the embeddings. Word2Vec is used because we must convert the words into an understandable form for the computer. To do this, we convert the words into numbers/vectors. By converting them to numbers, we can then analyse context in terms of placement of words by learning mapping vectors.

In question 2, I created a rocchio algorithm function which I used for relevance feedback. The rocchio algorithm improved the MAP Score over the Baseline and would have theoretically helped in improving the score of the query expansion system as well to a higher degree. The relevance feedback system had a higher MAP Score as it uses user feedback to provide weights and importance to queries. In this code, the Baseline was approximately .49 and the relevance feedback mechanism solely increased this to .505. However, it would have increased to beyond .70 in the query expansion.