Lab 02 Word2vec imbedding

22210802 Haeeul HWANG

1. the % of times that d(word, synonym) < d(word, antonym)

   adjectives: 15.50
   nouns: 1.92
   verbs: 8.42

2. the average distance d(word, synonym) and d(word, antonym)

   synonym :   0.682
   antonym :   0.65

3. Is the result consistent across the 3 word categories considered?

   ad_syn_avg :   0.64
   ad_ant_avg :   0.658
   noun_syn_avg :   0.683
   noun_ant_avg :   0.589
   verb_syn_avg :   0.723
   verb_ant_avg :   0.703

4. What can you conclude?

   For adjectives, nouns, and verbs, the percentage of times that the d(word, synonym) is lower than the d(word, antonym) is 15.5%, 1.9%, and 8.4%, respectively.
   Since these percentages are relatively low, it suggests that, on average, the distance between a word and its synonym tends to be higher than the distance between the word and its antonym.
   This is a good indicator that the word embeddings are capturing the meaning of the words.
   For adjectives, the distance between a word and its antonym is slightly higher than the distance between the word and its synonym.
   This inconsistency suggests that the relationship between words and their antonyms may vary depending on the part of speech.