**Assignment 3**

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**Q: Use genism library to get the most similar words to a given word. Find 20 most similar**

**words to “good” and “bad”. Are the words most similar to “good” positive, and words**

**most similar to “bad” negative?**

The results demonstrate how effective Word Vectors are in understanding context between words. The result show that this algorithm is easily able to identify words that are based on similar concepts, even though they are less likely to appear in the same sentences.

The most similar word with “good” is “great”, and the next are decent, fantastic, excellent, nice and so on. The result also shows that “bad” is similar with “good”. The reason for this is because these words are more likely to have similar labels, which forces their vectors to train into values that can predict those labels correctly.

The most dissimilar words with “bad” are shown in the list: “edition”, “fl”, “chefs\_knives”… They all have no relationship with the target word “bad”, can be looked as “noise words”.