1. Using 10 (4-grams) of vectors (Paris, France:London, England) Do the vector addition and subtraction and compare the vector to the last remaining vectors (aka Paris – France + England compared to London) Do this in GenSim
2. Repeat the exercise in SpaCy
3. Compare the same vectors from Spacy and Gensim. Can you mix the vectors from each group?
4. Using the scipy distance formula:

<https://docs.scipy.org/doc/scipy/reference/generated/scipy.spatial.distance.cosine.html#scipy.spatial.distance.cosine>

Compare your results in SpaCy to this formula. What is the difference. What was changed

1. Manually verify the distance calculations (aka write your own formula) for Spacy Similarity and Scipy similarity. Did you match up the exact results?

Scipy, (spacy & genism same but vectors are different)

Use cosine similarity and not cosine distance.



