

Foundations of Information Retrieval

Exercise 5

Exercise session: 07.12.2017
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1. TF/IDF weighting and the Vector Space Model

Given is a document collection with two documents:

Document 1:

A good cook could cook as much cookies as a good cook who could cook cookies.

Document 2:

Best chocolate chip cookies recipe.

- a. Index both documents using an inverted index. Apply case folding, use stop words list: {a, as}. Include TF and DF values at suitable positions in the index.
- b. Compute the cosine similarity between these documents and the following queries. Apply the **l_{tc}** weighting from the lecture.

$Q_1 = \text{cookies}$

$Q_2 = \text{how to cook chocolate cake}$

- c. Explain the similarity scores! How would the result change with the **l_{nc}** weighting?