# Analysis of different approaches

BM25 scoring function

The BM25 scoring function does not work well when the keyword searched for is contained in more than half of the corpus documents. In this case, the inverse document frequency function will return a negative value, and a document that does not contain the phrase queried for might be scored higher than a document that contains the query.

However, this behavior can be treated in a number of ways. We implemented one of these fixes, and we fixed it by giving each term in the function a floor of 0.005, to avoid counting very common words.