

## Assignment 1

To implement an Inverted Index model in python, apply these steps to the given documents:

**Doc 1: The cat in the hat**

**Doc 2: The cat sat on the mat**

**Doc 3: The dog ate my homework**

**Doc 4: I hate cats and dogs**

### Step 1: Prepare the data

You need to prepare the data for indexing and retrieval. This involves reading in the documents, preprocessing them (**tokenization, stopwords removal, stemming and Lower Case**) using NLTK library, and storing them in a data structure that can be indexed.

### Step 2: Build the index

The index is typically an inverted index, which maps each term to the documents that contain that term.