1. **Implement a simple Named Entity Recognition (NER) function that identifies named entities in a sentence. The function should return a list of these named entities. For example, given the sentence "Ramesh lives in Mumbai", the function should return ["Ramesh", "Mumbai"].**

Text1: "James is the author of Atomic Habits"
Text2: "Aarti works at Accenture"

2.Design a function that classifies a text as either "spam" or "imp" (non-spam) based on the presence of certain keywords. For example, if the text contains words like "buy", "free", "offer", or "click", it should be classified as "spam". If these words are not present, the text should be classified as "imp". The function should return the appropriate classification.

Text1: "Buy 1 Get 1 Free"
Text2: "Meeting is scheduled at 12 PM "
Text2: "Click on the link below to see the offer."

3. Create a function that should return a list of stemmed words.
e.g ['running'] = ['run']
list = ['painful','standing','abstraction','magically']

4. Implement a function that takes a list of tokens (words) and removes all stopwords from it. For example, if the input tokens are ["This", "is", "a", "test"] and the stopwords are ["is", "a", "the"], the function should return ["This", "test"].

Stopwords = [“is”,”a”,”the”, “an”,”she”]
Sentence1: “an apple is on the table.”
Sentence2: “She is an engineer.”

5 . Perform lemmatzation on the given text

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text= "Dancing is an art. Students should be taught dance as a subject in schools . I danced in many of my school function. Some    people are always hesitating to dance."
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