# Tool Description

Natural Language Toolkit (NLTK) is a collection of libraries that are required to carry out the NLP process. These libraries contain packages and modules that are used for building Python programs. By importing different packages in the Python environment, the machine can understand input text written in natural language and provide an appropriate response. Some of the NLTK packages are tokenisation, lemmatisation, stemming, character count, punctuation and word count.

# Lab Tasks

For building an NLP model, the following steps need to be implemented with the help of different libraries:

1. Processing tokenisation of words and phrases using the **NLTK** module.
2. Predicting Parts of Speech (POS) for tagging each token using the **NLTK** module.
3. Performing text lemmatising using **NLTK** and **PorterStemmer** modules.
4. Identifying stop words using **NLTK** and **Corpus** modules.
5. Performing dependency parsing and chunking using **NLTK** libraries.
6. Performing the Name Entity Recognition (NER) process using **NLTK** libraries and **spaCy** module.