



Aim: Implement POS Tagging

Objective: To study POS tagging and implement POS tagging using NLTK package in python.

Theory: The primary target of POS tagging is to identify the grammatical group of a given word. Whether it is a NOUN, PRONOUN, ADVERB, ADJECTIVE, VERB etc. based on the context. POS tagging looks for relationships within the sentence and assigns a corresponding tag to a word.

POS Tagging(Parts of speech tagging) is the process to make up the words in the text format for a particular part of speech based on its definition and context. It is responsible for the text reading in a language and assigning some specific token to each word. It is also called grammatical tagging.

Steps involved in the POS tagging Example:

- Tokenize text
- Apply POS tag to above step, that is nltk pos tag.

Program:

```
import nltk
```

```
from nltk import word_tokenize
```

```
text = "The teens wondered what was kept in the red shed on the far edge of the  
school
```

```
grounds."
```

```
tokensied_text = word_tokenize(text)
```

```
tokensied_text
```

```
pos_tagged_text = nltk.pos_tag(tokensied_text)
```

```
pos_tagged_text
```

```
!pip3 install svglint
```

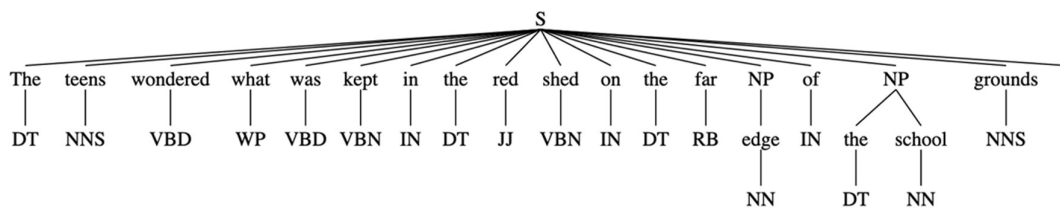
```
parsed_text = regParse.parse(pos_tagged_text)
```

```
parsed_text
```



Output:

[('The', 'DT'),
('teens', 'NNS'),
('wondered', 'VBD'),
('what', 'WP'),
('was', 'VBD'),
('kept', 'VBN'),
('in', 'IN'),
('the', 'DT'),
('red', 'JJ'),
('shed', 'VBN'),
('on', 'IN'),
('the', 'DT'),
('far', 'RB'),
('edge', 'NN'),
('of', 'IN'),
('the', 'DT'),
('school', 'NN'),
('grounds', 'NNS'),
(',', ' '),
('.', ' ')]





Conclusion: Part-of-Speech (POS) tagging constitutes a crucial task within the field of natural language processing (NLP). Its primary function is to assign grammatical categories, such as nouns, verbs, or adjectives, to individual words in a given text. This assignment plays a pivotal role in enhancing our comprehension of the syntactic structure and semantics of a sentence. Here is the POS tagging outcome for the provided input text:

Original Text: "The teens wondered what was kept in the red shed on the far edge of the school grounds."

POS Tagging Result:

- "The" -> Determiner (DET)
- "teens" -> Noun (NOUN)
- "wondered" -> Verb (VERB)
- "what" -> Pronoun (PRON)
- "was" -> Verb (VERB)
- "kept" -> Verb (VERB)
- "in" -> Adposition (ADP)
- "the" -> Determiner (DET)
- "red" -> Adjective (ADJ)
- "shed" -> Noun (NOUN)
- "on" -> Adposition (ADP)
- "the" -> Determiner (DET)
- "far" -> Adjective (ADJ)
- "edge" -> Noun (NOUN)
- "of" -> Adposition (ADP)
- "the" -> Determiner (DET)
- "school" -> Noun (NOUN)
- "grounds" -> Noun (NOUN)
- "." -> Punctuation (PUNCT)