EXPERIMENT 8:: EXPLAIN ABOUT POS TAGGING

INTRODUCTION::

Part-of-speech (POS) tagging is a process in <u>natural language processing</u> (NLP) where each word in a text is labeled with its corresponding part of speech. This can include nouns, verbs, adjectives, and other grammatical categories.

POS tagging is useful for a variety of NLP tasks, such as information extraction, named entity recognition, and machine translation. It can also be used to identify the grammatical structure of a sentence and to disambiguate words that have multiple meanings.

Parts of Speech Tagging

```
import nltk
from nltk.tokenize import word tokenize
# Download NLTK tokenizer and POS tagging models
nltk.download('punkt')
nltk.download('averaged perceptron tagger')
def pos tagging(text):
  # Tokenize the text into words
  words = word tokenize(text)
  # Perform POS tagging
  tagged words = nltk.pos tag(words)
  return tagged words
# Example text
```

text = "NLTK is a leading platform for building Python programs to work with human language data."

```
# Perform POS tagging
tagged_text = pos_tagging(text)
# Print POS tagged text
print(tagged_text)
```