

**PROGRAM [14]:**

```
import nltk

from nltk.tokenize import word_tokenize

from nltk import pos_tag

nltk.download('averaged_perceptron_tagger')

# Define sample text
text = """

Natural Language Processing (NLP) is a subfield of linguistics, computer science,
and artificial intelligence concerned with the interactions between computers and human
(natural) languages.

"""

# Tokenize text into words
words = word_tokenize(text)

# Tag parts of speech for each word
pos_tags = pos_tag(words)

# Print parts of speech tags
print(pos_tags)
```

OUTPUT [14]:

```
[nltk_data] Downloading package  
averaged_perceptron_tagger to
```

```
[nltk_data] /root/nltk_data...
```

```
[nltk_data] Unzipping  
taggers/averaged_perceptron_tagger.zip.
```

```
[('Natural', 'JJ'), ('Language', 'NNP'), ('Processing',  
'NNP'), ('(', '('), ('NLP', 'NNP'), (')', ')'), ('is', 'VBZ'), ('a', 'DT'),  
( 'subfield', 'NN'), ('of', 'IN'), ('linguistics', 'NNS'), (',', ','),  
( 'computer', 'NN'), ('science', 'NN'), (',', ','), ('and', 'CC'),  
( 'artificial', 'JJ'), ('intelligence', 'NN'), ('concerned',  
'VBN'), ('with', 'IN'), ('the', 'DT'), ('interactions', 'NNS'),  
( 'between', 'IN'), ('computers', 'NNS'), ('and', 'CC'),  
( 'human', 'JJ'), ('(', '('), ('natural', 'JJ'), (')', ')'),  
( 'languages', 'NNS'), ('.', '.')] ]
```