In [1]:
```python
import nltk
nltk.download('punkt')
nltk.download('averaged_perceptron_tagger')
```

```
C:\Users\pronn\anaconda3\lib\site-packages\scipy\__init__.py:155: UserWarning: A N
umPy version >=1.18.5 and <1.25.0 is required for this version of SciPy (detected
version 1.26.0
  warnings.warn(f"A NumPy version >={np_minversion} and <{np_maxversion}"
[nltk_data] Downloading package punkt to
[nltk_data]     C:\Users\pronn\AppData\Roaming\nltk_data...
[nltk_data]   Package punkt is already up-to-date!
[nltk_data] Downloading package averaged_perceptron_tagger to
[nltk_data]     C:\Users\pronn\AppData\Roaming\nltk_data...
[nltk_data]   Unzipping taggers\averaged_perceptron_tagger.zip.
```

Out[1]: True

In [2]:
```python
from nltk.tokenize import word_tokenize

sentence = input("Enter a text: ")
words = word_tokenize(sentence)
```

```
Enter a text: We are living in an era where data is being generated at a significa
ntly fast pace.
```

In [3]:
```python
from nltk import pos_tag

tags = pos_tag(words)
```

In [4]:
```python
import nltk
from nltk.tokenize import word_tokenize
from nltk import pos_tag

# Download NLTK data
nltk.download('punkt')
nltk.download('averaged_perceptron_tagger')

# Tokenize the sentence

words = word_tokenize(sentence)

# Perform part-of-speech tagging
tags = pos_tag(words)

# Print the tagged words and their tags
for word, tag in tags :
    print(f"{word} : {tag}")
```

```
We : PRP
are : VBP
living : VBG
in : IN
an : DT
era : NN
where : WRB
data : NN
is : VBZ
being : VBG
generated : VBN
at : IN
a : DT
significantly : RB
fast : JJ
pace : NN
. : .
```

```
[nltk_data] Downloading package punkt to
[nltk_data]     C:\Users\pronn\AppData\Roaming\nltk_data...
[nltk_data]   Package punkt is already up-to-date!
[nltk_data] Downloading package averaged_perceptron_tagger to
[nltk_data]     C:\Users\pronn\AppData\Roaming\nltk_data...
[nltk_data]   Package averaged_perceptron_tagger is already up-to-
[nltk_data]       date!
```

In [5]:
```python
import nltk
from nltk.tokenize import word_tokenize
from nltk import pos_tag

# Download NLTK data
nltk.download('punkt')
nltk.download('averaged_perceptron_tagger')

# Tokenize the sentence

words = word_tokenize(sentence)

# Perform part-of-speech tagging
tags = pos_tag(words)

# Print the tagged words and their tags
for word, tag in tags :
    print(f"{word} : {tag}")
```

```
We : PRP
are : VBP
living : VBG
in : IN
an : DT
era : NN
where : WRB
data : NN
is : VBZ
being : VBG
generated : VBN
at : IN
a : DT
significantly : RB
fast : JJ
pace : NN
. : .
```

```
[nltk_data] Downloading package punkt to
[nltk_data]     C:\Users\pronn\AppData\Roaming\nltk_data...
[nltk_data]   Package punkt is already up-to-date!
[nltk_data] Downloading package averaged_perceptron_tagger to
[nltk_data]     C:\Users\pronn\AppData\Roaming\nltk_data...
[nltk_data]   Package averaged_perceptron_tagger is already up-to-
[nltk_data]       date!
```

Spacy

In [6]:
```python
import spacy

nlp = spacy.load("en_core_web_sm")

doc = nlp(sentence)

for token in doc :
    print(f"{token.text} : {token.pos_}")
```

```
---------------------------------------------------------------------------
ModuleNotFoundError                       Traceback (most recent call last)
~\AppData\Local\Temp\ipykernel_7232\2172232552.py in <module>
----> 1 import spacy
      2
      3 nlp = spacy.load("en_core_web_sm")
      4
      5 doc = nlp(sentence)

ModuleNotFoundError: No module named 'spacy'
```