

Day-13[2211cs020206]

```
In [1]: 1 import spacy
2
3 def pos_tagging(text):
4     """
5     Perform part-of-speech tagging on the given text using SpaCy.
6
7     Args:
8         text (str): The input text to be POS tagged.
9
10    Returns:
11        list: A list of tuples with each word and its corresponding POS tag.
12    """
13    nlp = spacy.load('en_core_web_sm')
14    doc = nlp(text)
15    pos_tags = [(token.text, token.pos_) for token in doc]
16    return pos_tags
17 sentence = 'NLP is amazing and fun to learn.'
18 pos_tags = pos_tagging(sentence)
19 print("Part-of-speech tags:")
20 for word, pos in pos_tags:
21     print(f"{word}: {pos}")
```

Part-of-speech tags:

NLP: PROPN

is: AUX

amazing: ADJ

and: CCONJ

fun: ADJ

to: PART

learn: VERB

.: PUNCT

```
In [ ]: 1
```