## ▼ Load the spaCy language model

```
nlp = spacy.load("en_core_web_sm")
```

## Sample text input

```
text = "Apple Inc. is a company based in Cupertino, California. John works for Google in Mountain View."
```

## Process the text using spaCy

```
import spacy
# Load the spaCy language model
nlp = spacy.load("en_core_web_sm")
# Sample text input
text = "Apple Inc. is a company based in Cupertino, California. John works for Google in Mountain View."
# Process the text using spaCy
doc = nlp(text)
# Initialize variables to store named entities
named_entities = []
# Define a function to extract named entities
def extract_named_entities(doc):
    entities = []
    current_entity = None
    for token in doc:
            if current_entity and token.ent_type_ == current_entity[1]:
                current_entity = (current_entity[0] + " " + token.text, token.ent_type_)
            else:
                if current_entity:
                    entities.append(current_entity)
                current_entity = (token.text, token.ent_type_)
        else:
            if current_entity:
                entities.append(current_entity)
            current_entity = None
    if current entity:
        entities.append(current_entity)
    return entities
# Extract named entities
named_entities = extract_named_entities(doc)
# Print the named entities
for entity, label in named_entities:
    print(f"Entity: {entity}, Label: {label}")
     Entity: Apple Inc., Label: ORG
     Entity: Cupertino, Label: GPE
     Entity: California, Label: GPE
     Entity: John, Label: PERSON
     Entity: Google, Label: ORG
     Entity: Mountain View, Label: GPE
```