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

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# Load the spaCy language model

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# 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 token.ent\_type\_:

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