NLP Assignment-3

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Batch : 12

1. Implement Word Embeddings on following text

words = ['king', 'queen', 'man', 'woman', 'paris', 'france', 'london', 'england']. [CO1]

Importing necessary libraries

Implementing **word embeddings** on the given text

2. Implement Word Embeddings using PCA (Principal Component Analysis) on following text

words = ['king', 'queen', 'man', 'woman', 'paris', 'france', 'london', 'england']. [CO1]
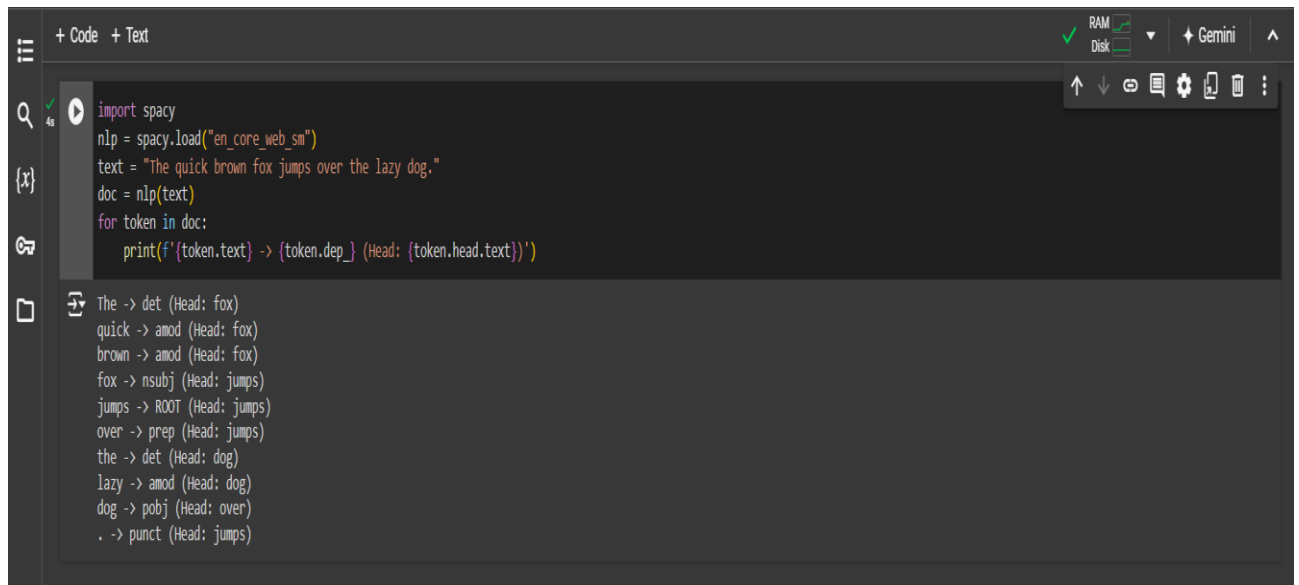
Implementing **Word Embeddings using PCA** on given text
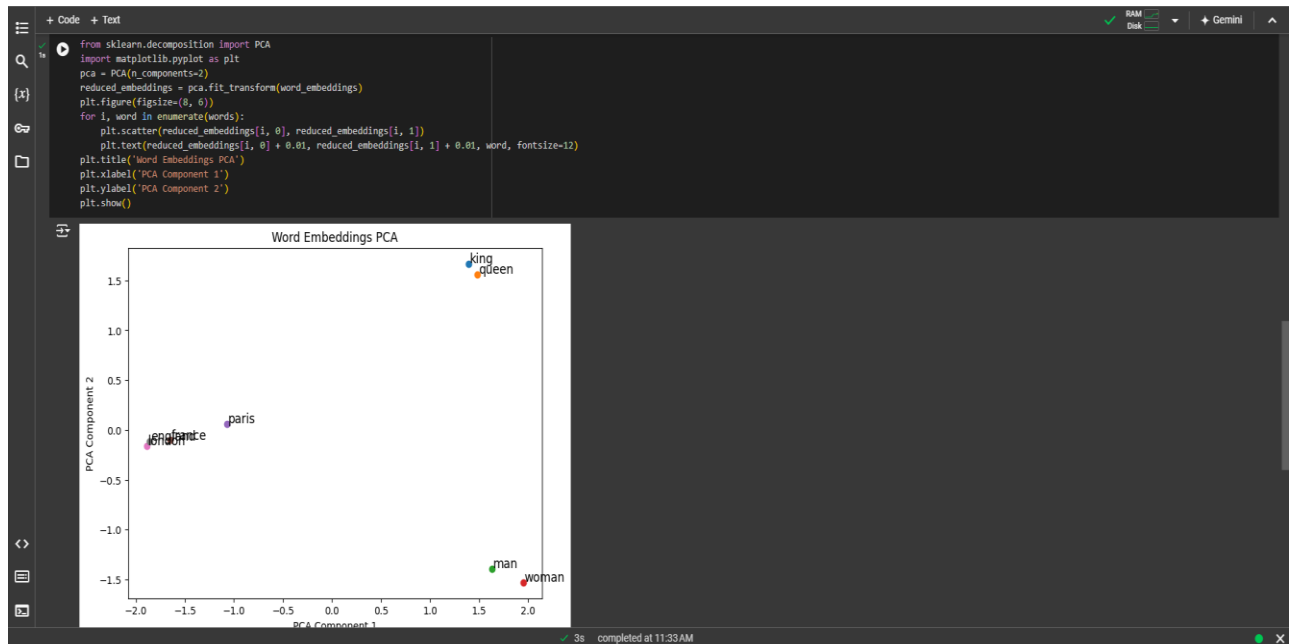
3. Execute Dependency Parsing on any text or on following text [CO1]

The quick brown fox jumps over the lazy dog

Executing **Dependency Parsing** on given text

```python
import spacy
nlp = spacy.load("en_core_web_sm")
text = "The quick brown fox jumps over the lazy dog."
doc = nlp(text)
for token in doc:
    print(f'{token.text} -> {token.dep_} (Head: {token.head.text})')
```

```
The -> det (Head: fox)
quick -> amod (Head: fox)
brown -> amod (Head: fox)
fox -> nsubj (Head: jumps)
jumps -> ROOT (Head: jumps)
over -> prep (Head: jumps)
the -> det (Head: dog)
lazy -> amod (Head: dog)
dog -> pobj (Head: over)
. -> punct (Head: jumps)
```