

Morphological Analysis & Word Generation

```
import nltk

nltk.download('words')

from nltk.corpus import words

[nltk_data] Downloading package words to
[nltk_data] C:\Users\2020s\AppData\Roaming\nltk_data...
[nltk_data] Package words is already up-to-date!
```

Input :

```
text = "callable"

morphemes = []

for i in range(1, len(text)):
    prefix = text[:i]
    suffix = text[i:]

    if prefix in words.words() and suffix in words.words():
        morphemes.append((prefix, suffix))
        #appends the pair (prefix, suffix) as a tuple to the morphemes list

print("Original Text:", text)

print("Morphological Analysis:")
for prefix, suffix in morphemes:
    print(f"    Prefix: {prefix}, Suffix: {suffix}")

#word generation
for (prefix, suffix) in morphemes:
    generated_words = prefix + suffix

print("Generated Word : " + generated_words)
```

Output :

```
Original Text: callable
Morphological Analysis:
    Prefix: call, Suffix: able
Generated Word : callable
```

Repo Link

https://github.com/Shreyaww/Sem7_NLP/blob/main/Experiment_4.ipynb