

PROGRAM-8

Aim: Write a program in python to implement stemming for a given sentence using NLTK

Logic: Stemming is the process of producing morphological variants of a root/base word.

Stemming programs are commonly referred to as stemming algorithms and stemmers. It reduces the given words into the root word.

Algorithm:

1. Import PorterStemmer from nltk.stem
2. Import word_tokenize from nltk.tokenize
3. Input a sentence
4. Tokenize it
5. Print the root word of each word in the sentence

Implementation:

```
from nltk.stem import PorterStemmer
from nltk.tokenize import word_tokenize

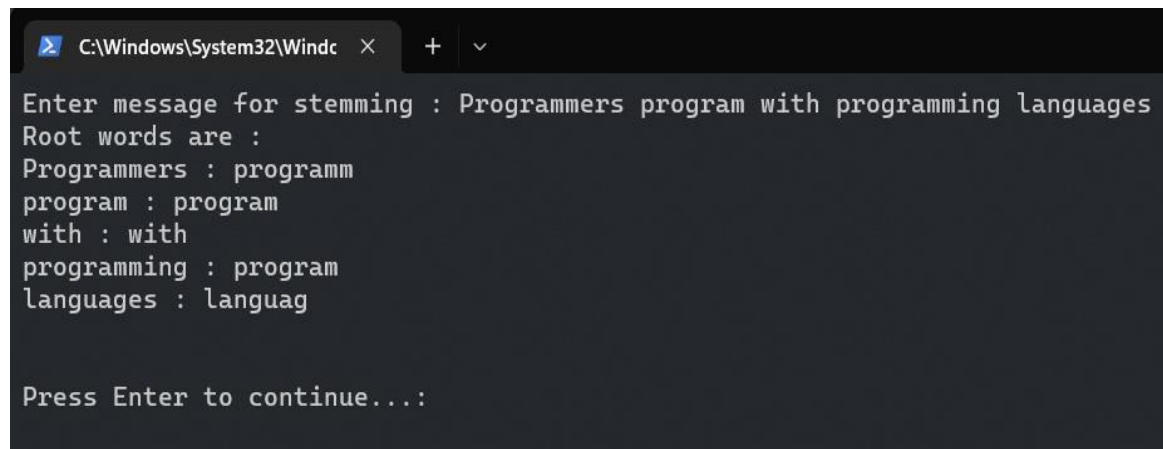
ps = PorterStemmer()
message = input("Enter message for stemming : ")
words = word_tokenize(message)

print("Root words are : ")
for word in words:
    print(f"{word} : {ps.stem(word)}")
```

Input:

Programmers program with programming languages

Output:



```
C:\Windows\System32\Windc > python program8.py
Enter message for stemming : Programmers program with programming languages
Root words are :
Programmers : programm
program : program
with : with
programming : program
languages : languag

Press Enter to continue...:
```