

EXPERIMENT 6 :: EXPLAIN ABOUT PARSE TREE OR SYNTAX TREE

GENERATION

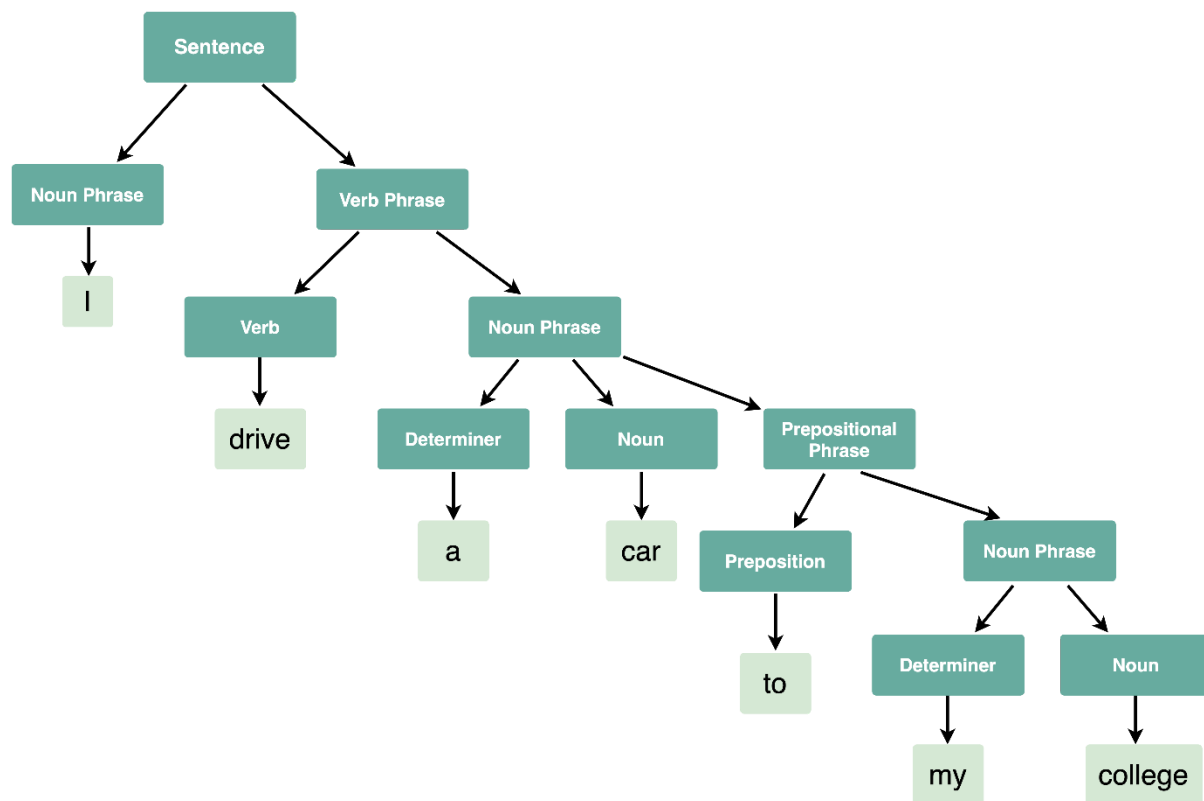
INTRDUCTION ::

A Syntax tree or a parse tree is a tree representation of different syntactic categories of a sentence. It helps us to understand the syntactical structure of a sentence.

Example:

The syntax tree for the sentence given below is as follows:

I drive a car to my college.



PROGRAM ::

----- 6. Parse tree or Syntax Tree generation -----

----- Parse Tree -----

```
grammar1 = nltk.CFG.fromstring("""
s -> NP VP
VP -> V NP | V NP PP
PP -> P NP
V -> "saw"|"ate"|"walked"
NP -> "John"|"Mary"|"Bob"|Det N|Det N PP
Det -> "a"|"an"|"the"|"my"
N -> "man"|"dog"|"cat"|"telescope"|"park"
p -> "in"|"on"|"by"|"with"
""")

sent = "Mary saw John".split()
rd_parser = nltk.RecursiveDescentParser(grammar1)
for tree in rd_parser.parse(sent):
    print(tree)
    tree[1].draw()
```

OUTPUT ::

(s (NP Mary) (VP (V saw) (NP John)))

