## EXPERIMENT 6:: EXPLAIN ABOUT PARSE TREE OR SYNTAX TREE GENERATION

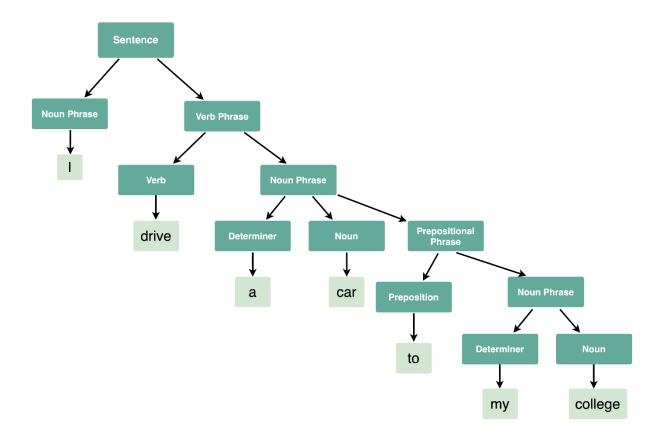
## **INTRDUCTION:**

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)))
```

