PROGRAM NO: 6

Parse tree for an English sentence

AIM

To write a program to Generate parce tree for an english sentence.

PROGRAM

```
def parse(tokens):
    """parse: tokens_iter or generator -> Node
    From an infix stream of tokens, and the current index into the
    token stream, construct and return the tree, as a collection of Nodes,
    that represent the expression."""

    next_tok = next(tokens)

    if next_tok.isdigit():
        return ('literal', next_tok)

    elif next_tok == "+":
        return ('add', parse( tokens ), parse( tokens )) # first argument is the node.left, second is the
node.right
    elif next_tok == "-":
        return ('sub', parse( tokens ), parse( tokens ))
    elif next_tok == "*":
        return ('mul', parse( tokens ), parse( tokens ))
    elif next_tok == "//":
        return ('div', parse( tokens ), parse( tokens ))

    else:
        return ('variable', next_tok )
```

```
a=raw_input("enter sting")
a=a.split()
# And, example:
```

RESULT

program to implement parce tree generation run successfully and obtained thr output

OUTPUT

enter sting - // y 2 x

('sub', ('div', ('variable', 'y'), ('literal', '2')), ('variable', 'x'))