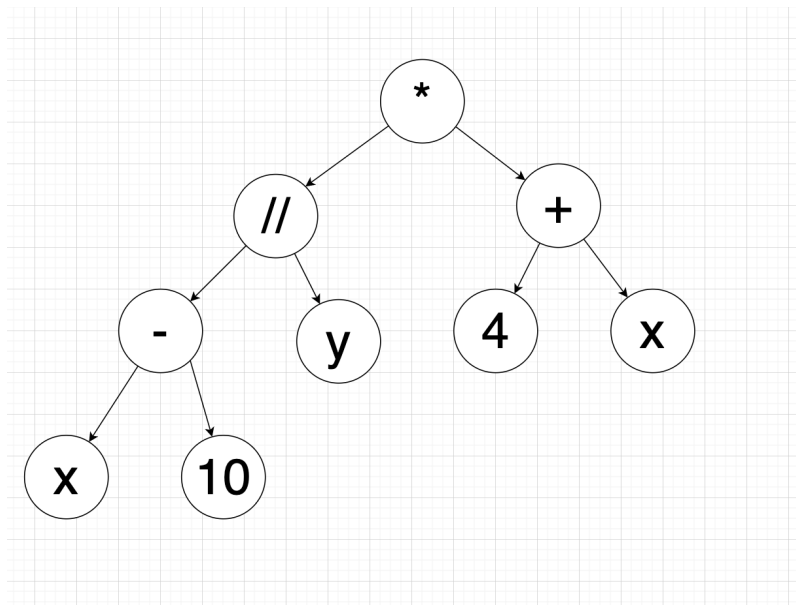


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1. `'- // y 2 x'`
2. `((y // 2) - x)`
- 3.

a.



b.

`['*', '/', '-', 'x', '10', 'y', '+', '4', 'x']`

c.

d. `(((x - 10) // y) * (4 + x))`

e. `(((10-10) // 20) * (4 + 10)) == ((0 // 20) * (14)) == (0 * 14) == 0`

```
OPERANDS = '+-*//'
```

```
def parse(tokens: list) -> Optional[MathNode, LiteralNode, VariableNode]:
    if tokens.empty():
        return None
    token = tokens[0]
    del tokens[0]

    if token in OPERANDS:
        left_child = parse(tokens)
        right_child = parse(tokens)
        return MathNode(left_child, right_child, token)

    elif token.isdigit():
        return LiteralNode(int(token))
    elif token.isidentifier():
        return VariableNode(token)
```

```
Tokens = ['+', 'x', 'y']
```

```
Def parse(tokens)
    If tokens is empty:
        Return None

    If tokens[0] in ['*', '+', '/', '//', '-']:
        Token = tokens[0] // +
        Del tokens[0]
        Left_child = parse(tokens) // LiteralNode(8)
// ['+', 'x', 'y']
        right_Child = parse(tokens)
        Return MathNode(left_Child, right_child, Token)

    If token[0].isdigit():
        Num = token[0]
        Del tokens[0]
        Return LiteralNode(int(num))

    If token[0].isidentifier():
        Var = token[0]
        Del token[0]
        Return VariableNode(var)
```

