

Week 9

This is week nine!

Compilers

- Lexers
- Parsers
- Translators

Ruby Tools

- frex
- racc
- your imagination!

Lexer

frex

```
module Calculator
class Lexer < Parser
macro
  num      \d+
rule
  {num}    { [:NUMBER, text.to_i] }
  \+      { [:PLUS, text] }
  \-      { [:MINUS, text] }
end
end
```

2+10

- [NUMBER, 2]
- [PLUS, '+']
- [NUMBER, 10]

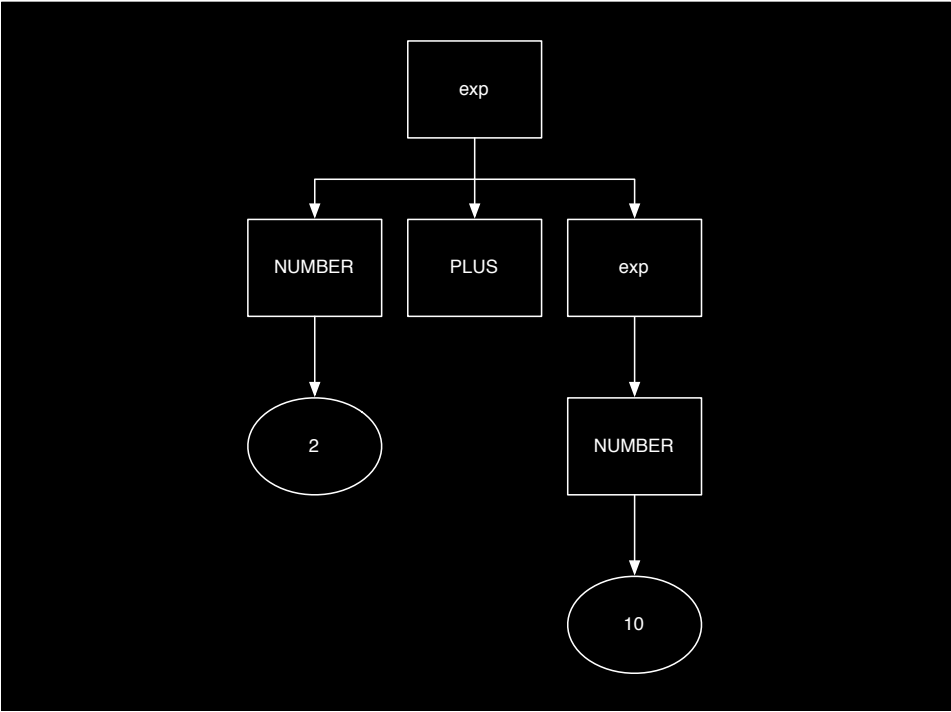
Parser

racc

```
class Calculator::Parser
  token NUMBER PLUS MINUS

  rule
    target
      : exp
      | /* none */ { result = 0 }
      ;

    exp
      : NUMBER PLUS exp { result = val[0] + val[2] }
      | NUMBER MINUS exp { result = val[0] - val[2] }
      | NUMBER
      ;
  end
end
```



Installing Frex

```
gem install tenderlove-frex
```

Installing Racc

```
gem install racc
```