

```
#|
<expr> ::= (num <num>)
          | (add <expr> <expr>)
          | (sub <expr> <expr>)
          | (if0 <expr> <expr> <expr>)
          | (with <id> <expr> <expr>)
          | (id <id>)

|#
;; Inductive type for representing arith-
;; metical expressions with conditionals
;; and identifiers
(deftype Expr
  (num n)
  (add l r)
  (sub l r)
  (if0 c t f)
  (with id named-expr body)
  (id x))
```