

[\[Browse source program\]](#) [\[Execute source program\]](#)

```
import Char

data Term = Term String [Term]

parseTerm s | s == fun++("++args++") &
             all isAlpha fun == True = Term fun (parseArgs args)
  where fun, args free
parseTerm s | all isAlpha s == True = Term s []

parseArgs s | s == term++",++terms" &
             parseTerm term == result = result : parseArgs terms
  where term, terms, result free
parseArgs s | parseTerm s == result = [result]
  where result free

-- test1 = parseTerm "f(g(a,b))"
-- => Term "f" [Term "g" [Term "a" [],Term "b" []]]
-- test2 = parseTerm "zero"
-- => Term "zero" []
```