

Languages-beta: SL-1-Lexemes

The PPlanCompS Project

Languages-beta/SL/SL-1-Lexemes/SL-1-Lexemes.cbs*

Language "SL"

1 Lexemes

Identifiers

Lexis $Id : id ::= (a - z \mid A - Z) (a - z \mid A - Z \mid 0 - 9)^*$

Semantics $id \llbracket Id : id \rrbracket : \Rightarrow ids$

Rule $id \llbracket Id \rrbracket =$
"Id"

Numerals

Syntax $Int : int ::= -?_{nat}$

Lexis $Nat : nat ::= (0 - 9)^+$

Semantics $int-val \llbracket Int : int \rrbracket : \Rightarrow integers$

Rule $int-val \llbracket - Nat \rrbracket =$
 $integer-negate \ int-val \llbracket Nat \rrbracket$

Rule $int-val \llbracket Nat \rrbracket =$
 $decimal-natural \ "Nat"$

*Suggestions for improvement: plancomps@gmail.com.
Issues: <https://github.com/plancomps/CBS-beta/issues>.

Strings

Syntax $String : \text{string} ::= \text{"_string-chars_"}"$

Lexis $StringChars : \text{string-chars} ::= \text{string-char}^*$
 $\text{string-char} ::= \sim (" \mid \backslash \mathbf{n})$

Semantics $\text{string-val} \llbracket String : \text{string} \rrbracket : \Rightarrow \text{strings}$
Rule $\text{string-val} \llbracket " StringChars " \rrbracket =$
 "StringChars"