

Unstable-Languages-beta: IMPPP-1 *

The P_LanCompS Project

IMPPP-1.cbs | PLAIN | PRETTY

OUTLINE

1 Values

Integers
Strings
Identifiers

Language “IMPPP”

1 Values

Integers

Syntax $N : \text{int} ::= \text{'-'}? _ \text{decimal}$

Lexis $D : \text{decimal} ::= (0' - 9')^+$

Semantics $\text{int-val}[_ : \text{int}] : \Rightarrow \text{integers}$

Rule $\text{int-val}[D] = \text{decimal-natural}(\text{"D"})$

Rule $\text{int-val}[\text{'-'} D] = \text{integer-negate}(\text{int-val}[D])$

Strings

Syntax $S : \text{string} ::= \text{'"} _ \text{string-chars} _ \text{'"}$

Lexis $\text{SCS} : \text{string-chars} ::= (\sim \text{'"})^*$

Semantics $\text{string-val}[_ : \text{string}] : \Rightarrow \text{strings}$

Rule $\text{string-val}[\text{'"} \text{SCS} \text{'"}] = \text{"SCS"}$

Identifiers

Lexis $I : \text{id} ::= (\text{'A'} - \text{'Z'} \mid \text{'a'} - \text{'z'} \mid \text{'_'}) (\text{'0'} - \text{'9'} \mid \text{'A'} - \text{'Z'} \mid \text{'a'} - \text{'z'} \mid \text{'_'})^*$

Semantics $\text{id}[_ : \text{id}] : \Rightarrow \text{ids}$

Rule $\text{id}[I] = \text{"I"}$

Lexis $\text{keyword} ::= \text{'else'} \mid \text{'false'} \mid \text{'if'} \mid \text{'halt'} \mid \text{'join'}$
 $\mid \text{'print'} \mid \text{'read'} \mid \text{'spawn'} \mid \text{'true'} \mid \text{'while'}$

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