

Language 2: BNF Syntax

$\langle \text{program} \rangle ::= \text{program } \langle \text{id} \rangle \text{ is } \langle \text{block} \rangle$

$\langle \text{block} \rangle ::= \langle \text{declseq} \rangle \text{ begin } \langle \text{com-seq} \rangle \text{ end}$

$\langle \text{declseq} \rangle ::= \langle \text{decl} \rangle \mid \langle \text{declseq} \rangle ; \langle \text{decl} \rangle$

$\langle \text{decl} \rangle ::= \langle \text{type} \rangle \langle \text{id} \rangle \mid \text{const } \langle \text{type} \rangle \langle \text{id} \rangle = \langle \text{expr} \rangle$

$\langle \text{com-seq} \rangle ::= \langle \text{com} \rangle \mid \langle \text{com-seq} \rangle , \langle \text{com} \rangle$

$\langle \text{com} \rangle ::= \text{if } \langle \text{expr} \rangle \text{ then } \langle \text{com-seq} \rangle \text{ end if} \mid \langle \text{id} \rangle := \langle \text{expr} \rangle \mid \text{write } \langle \text{expr} \rangle \mid \text{read } \langle \text{id} \rangle$

$\langle \text{expr} \rangle ::= \text{num} \mid \text{true} \mid \text{false} \mid \text{character}$

$\langle \text{type} \rangle ::= \text{int} \mid \text{bool} \mid \text{char}$