

CS 1233 - Fall 2014

Object Oriented and Design

Preliminary Grammar for the Compiler

$P := \text{program } D \text{ begin } S \text{ end.}$

$D := IL : AR \ D \mid IL : \text{integer } D \mid \epsilon$

$AR := \text{array} \mid \text{array}(AR)$

$IL := ID \ IL \mid , \ ID \ IL \mid \epsilon$

$ID := \text{id} \mid \text{id}(SB)$

$SB := \text{cons } SB \mid \text{id } SB \mid , \ \text{cons } SB \mid , \ \text{id } SB \ \text{mid } \epsilon$

$S := \text{do } S \text{ unless } C ; S \mid \text{do } S \text{ when } C ; S \mid \text{do } S \text{ when } C \text{ else } S ; S \mid (IL) \text{ in } ; S \mid (IL) \text{out} ; S \mid$
 $\text{assign } E \text{ to } ID ; S \mid \epsilon$

$E := \text{id} \mid \text{cons} \mid + \ EE \mid -EE \mid *EE \mid /EE$

$C := !EE \mid !EE \mid =EE \mid \text{and } CC \mid \text{or } CC \mid \text{not } C$