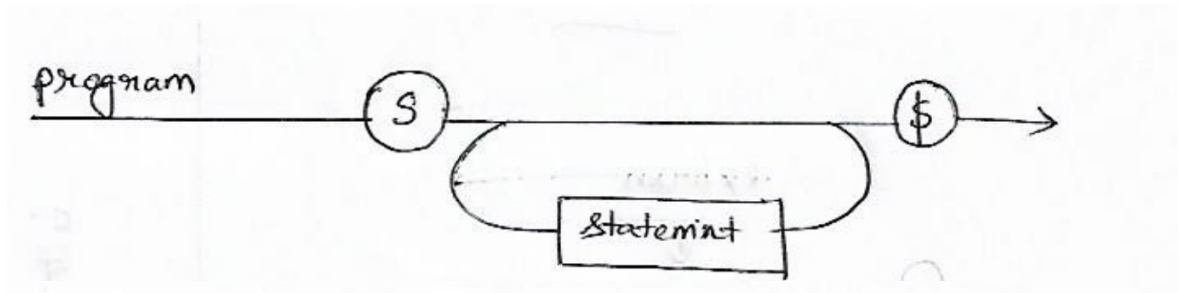


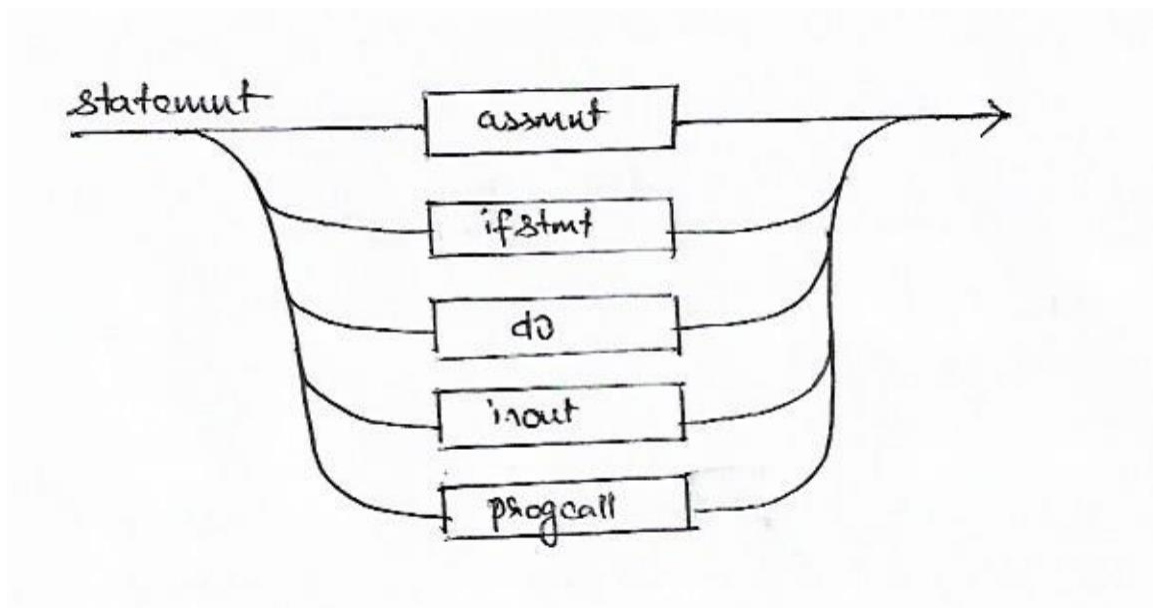
Shandilya, Anshul Kumar  
 Instructor, Scott Gordon  
 Csc 135, #2  
 2/27/2019

**Programming Assignment #1 (Syntax Diagrams)**

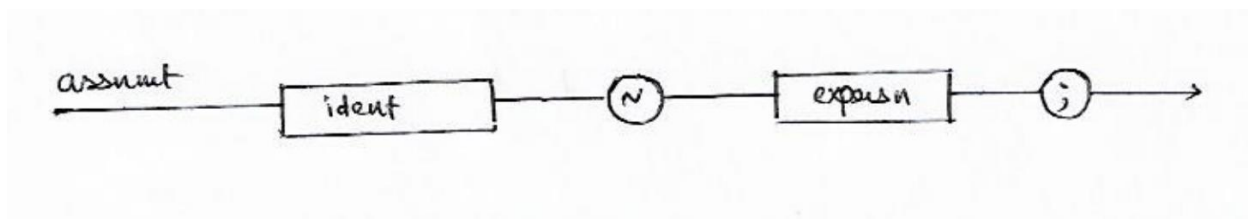
1. `program ::= S {statement}`



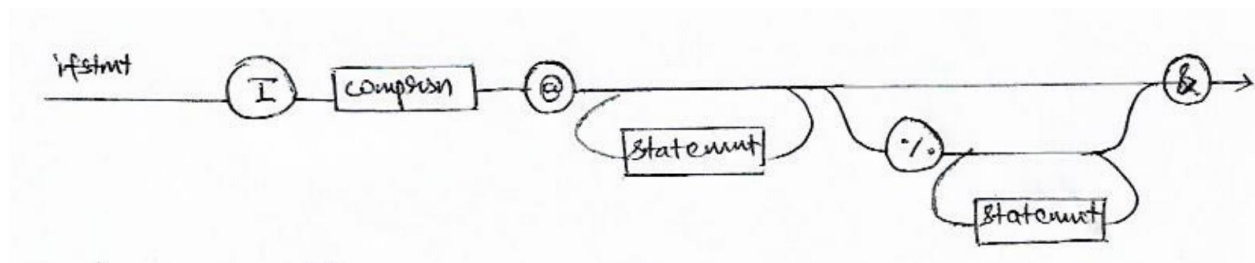
2. `statement ::= assmt | ifstmt | do | inout | progcall`



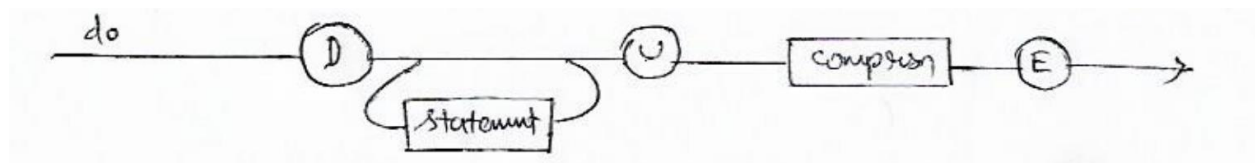
3. `assmt ::= ident ~ exprsn ;`



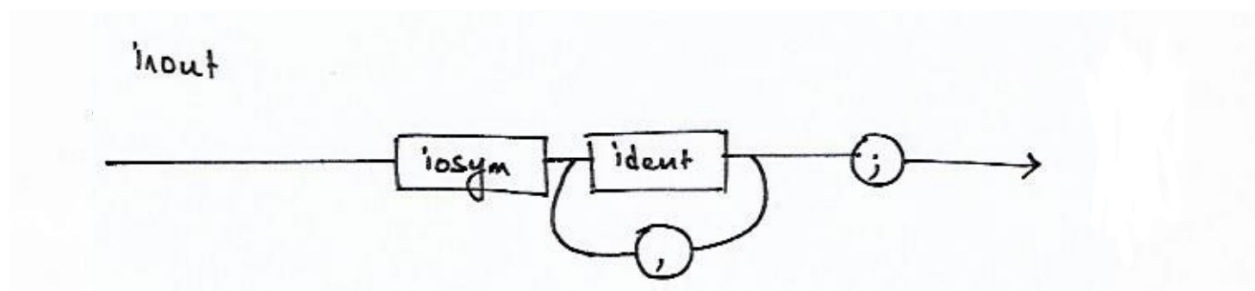
4.  $\text{ifstmt} ::= \text{I comprsn } @ \{ \text{statemt} \} [\% \{ \text{statemt} \}] \&$



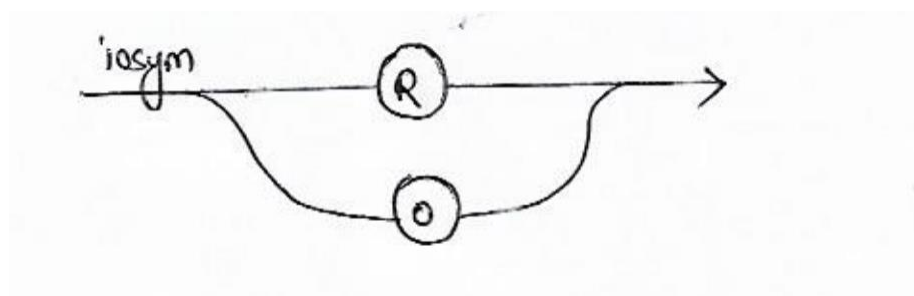
5.  $\text{do} ::= \text{D } \{ \text{statemt} \} \text{ U comprsn } \text{E}$



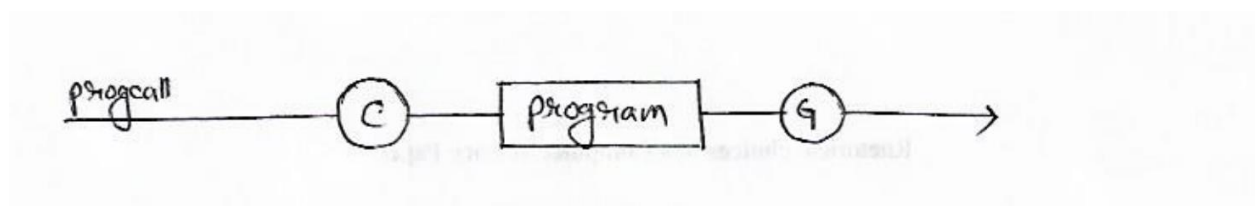
6.  $\text{inout} ::= \text{iosym ident } \{ , \text{ident} \} ;$



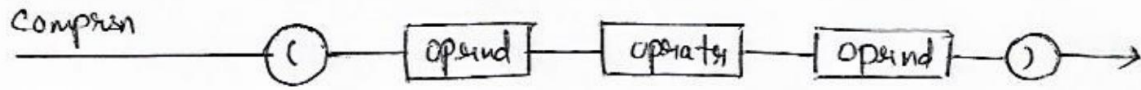
7.  $\text{iosym} ::= \text{R} \mid \text{O}$



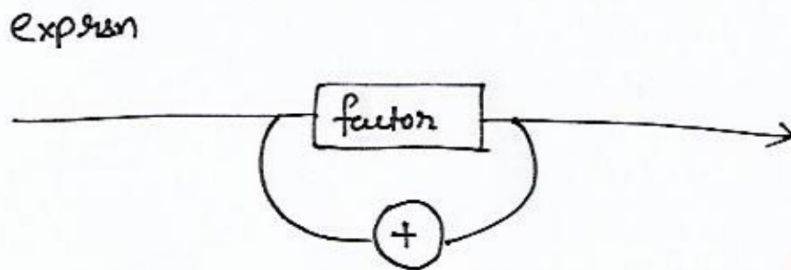
8.  $\text{progcalls} ::= \text{C program G}$



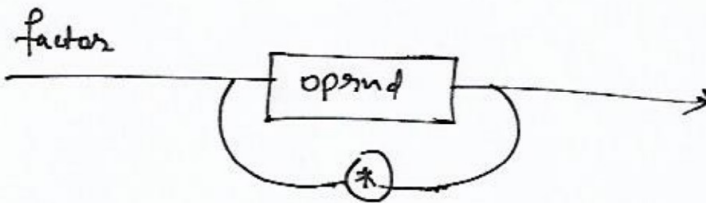
9.  $\text{comprsn} ::= (\text{oprnd opratr oprnd})$



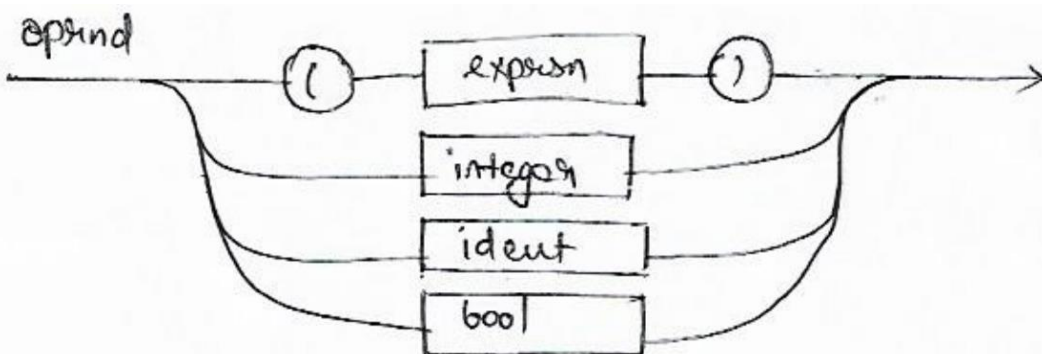
10.  $\text{exprsn} ::= \text{factor} \{+ \text{factor}\}$



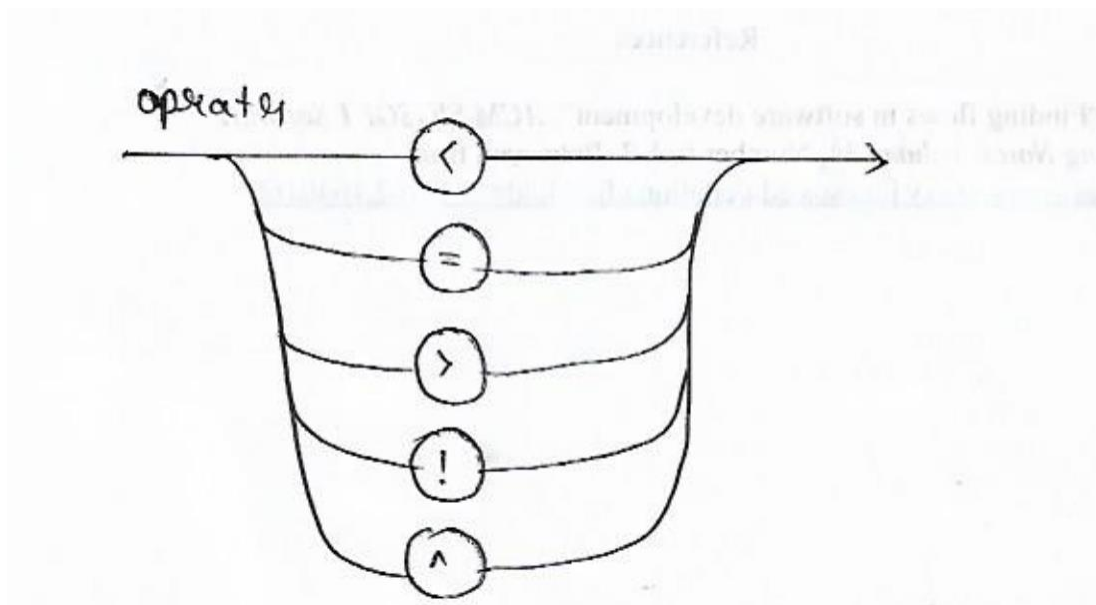
11.  $\text{factor} ::= \text{oprnd} \{ * \text{oprnd} \}$



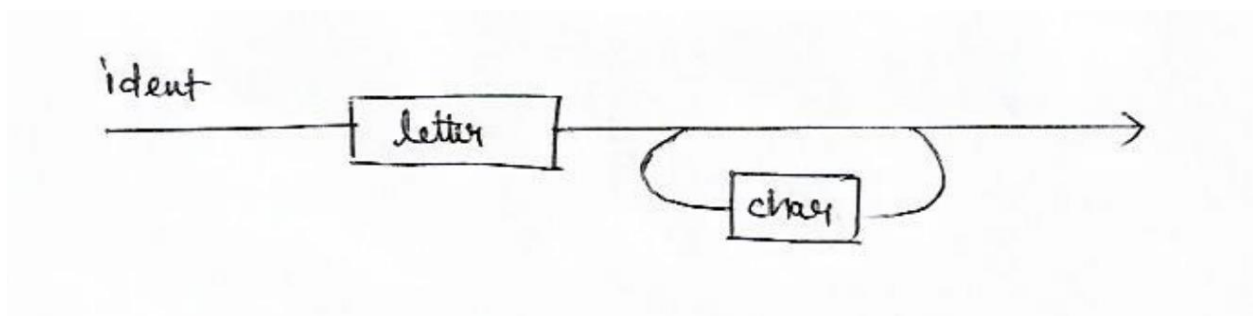
12.  $\text{oprnd} ::= \text{integer} \mid \text{ident} \mid \text{bool} \mid (\text{exprsn})$



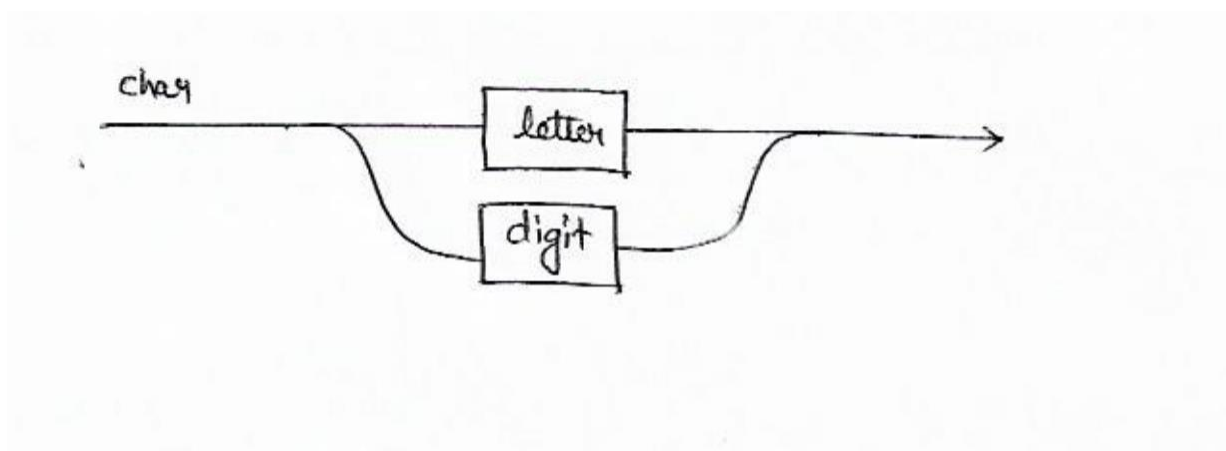
13.        `opratr ::= < | = | > | ! | ^`



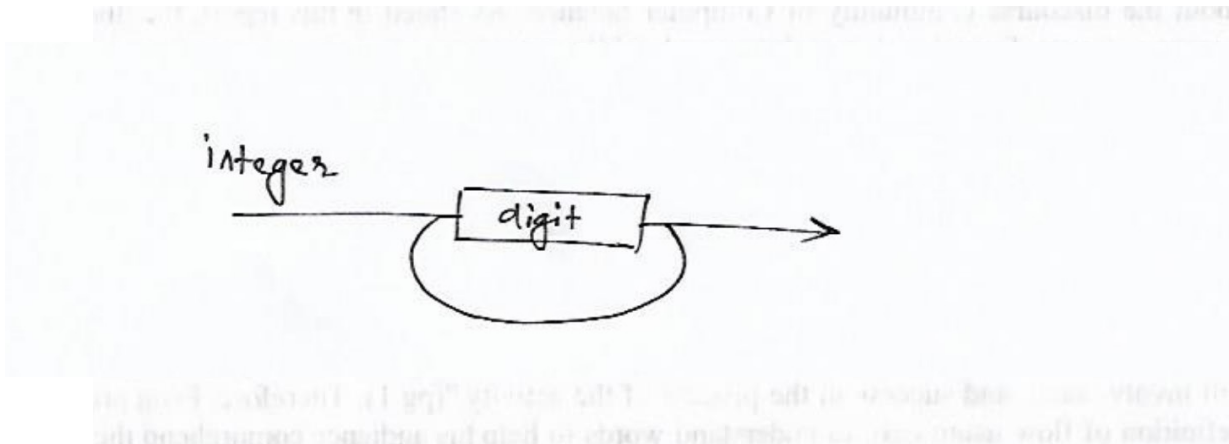
14.        `ident ::= letter {char}`



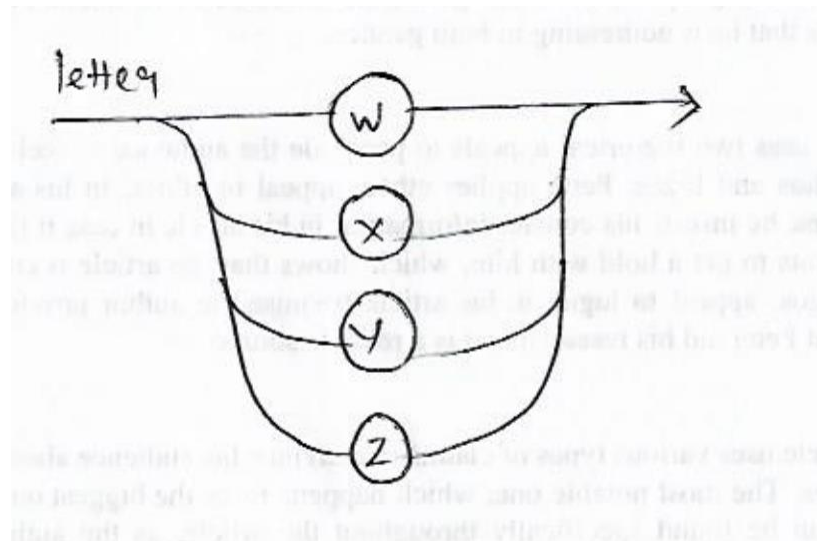
15.        `char ::= letter | digit`



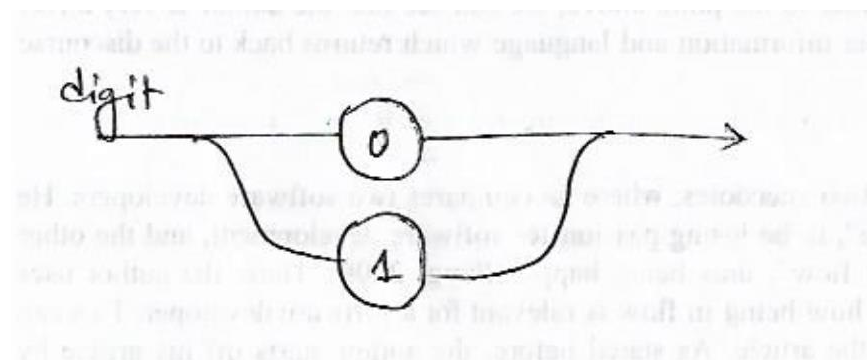
16. `integer ::= digit {digit}`



17. `letter ::= W | X | Y | Z`



18. `digit ::= 0 | 1`



20.        `bool        ::= T | F`

