

# Mini Assignment 0

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20 points

Submit your L<sup>A</sup>T<sub>E</sub>X solution to the dropbox on d2l. Given the following grammar:

$\langle \text{VarDecl} \rangle \rightarrow \text{int } \langle \text{VarList} \rangle ;$   
 $\langle \text{VarList} \rangle \rightarrow \langle \text{Identifier} \rangle \mid \langle \text{Identifier} \rangle , \langle \text{VarList} \rangle$   
 $\langle \text{Identifier} \rangle \rightarrow \langle \text{Letter} \rangle \mid \langle \text{Identifier} \rangle \langle \text{Letter} \rangle \mid \langle \text{Identifier} \rangle \langle \text{Digit} \rangle$   
 $\langle \text{Integer} \rangle \rightarrow \langle \text{Digit} \rangle \mid \langle \text{Digit} \rangle \langle \text{Integer} \rangle$   
 $\langle \text{Letter} \rangle \rightarrow \text{a} \mid \text{b} \mid \text{c} \mid \text{d}$   
 $\langle \text{Digit} \rangle \rightarrow 1 \mid 2 \mid 3 \mid 4$

Provide a **parse tree** showing that:

**int a, b, c;**

is a valid  $\langle \text{VarDecl} \rangle$ .

