1. Comparing Languages

The two programming languages I chose were Perl and Haskell. Perl is an interpretive language and Haskell is a compiled language. Perl is a much more readable language than Haskell, mostly due to the fact that Haskell is a functional language and Perl is not. Functional languages are typically much harder for a human to read quickly than a non-functional language. In terms of writeability, Perl also has an advantage over Haskell. Because of how Perl combines many of the advantages of other languages, it allows the user to do many tasks quickly and with much less work than it would take to do the same task in a language like Haskell.

2. BNF

<method> → <method_header> { <statement_list> }
<method_header> → <method_type> <return_type> <method_name> (<parameter_list>)
<method_type> → public | private
<return_type> → int | double | char
<method_name> → <id>
<parameter_list> → <parameter>
→ <parameter> <parameter_list>
<parameter> → <data_type> <id>
<data_type> → int | double | char
<statement_list> → <statement>
→ <statement> <statement_list>

3. Sentential Form

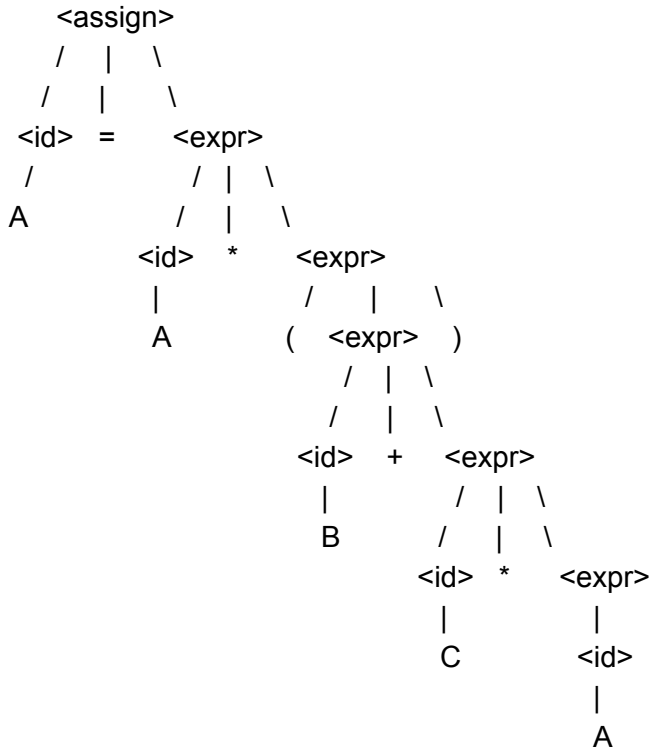
A = A * (B + C * A)
Unfortunately I didn't have the money to buy books for any of my classes this year, so I am not able to look up the specific BNF example you reference in the assignment. I hope that this at least shows that I understand the concept of writing a left-most derivation, and will count for at least partial credit. I am referring back to the example you gave the day this was covered in class, as well as my notes.

<assign> → <id> = <expr>
A = <expr>
A = <id> * <expr>
A = A * <expr>
A = A * (<expr>)
A = A * (<id> + <expr>)
A = A * (B + <expr>)
A = A * (B + <id> * <expr>)

A = A * (B + C * <expr>)
A = A * (B + C * <id>)
A = A * (B + C * A)

4. Parse Tree

Again, as I was unable to purchase the book, I am instead using what I have written in my notes for the day this was covered in lecture, and I hope it will show that I at least understand the concept and perhaps count for some partial credit.



Sources (for Question 1, since I am not familiar with either of the languages I chose):
http://blogs.perl.org/users/joel_berger/2014/01/on-the-relative-readability-of-perl-and-python.html
http://www.perlmonks.org/?node_id=472217
https://blog.interlinked.org/tutorials/haskell_introduction.html