1. Literal = /d+

Identifier = [A-Z|a-z|0-9]

Byte = #b

Word = #w

DWord = #d

QWord = #q

If Statement = /$i

For Loop = /$f

While Loop = /$w

Begin = !b

End = !e

1. BODMAS: Brackets, Order of powers and roots, Divide and Multiply, Add and Subtract
2. There are no left-hand grammar rules. Therefore, it is not left recursive.
3. This language is not read as ambiguous.
4. See the code in lexAnalyzer.java.
5. See the code in synAnalyzer.java.
6. Test1.in has 5 lexical errors:
7. === is not a valid comparison symbol.
8. $l is not a valid identifier.
9. +, is a lexeme that does not exist.
10. There should be no space between # and d.
11. \*\* is not a valid lexeme.

Test2.in has 5 syntax errors:

1. A semicolon is missing in line 2.
2. Line 4 has an incorrect symbol.
3. Line 5 is missing an ! with e.
4. Vari2 is an incorrect variable token.
5. “<” in line 2 causes a comparison error.

Test3.in and Test4.in are correct.

1. See images in Replit account: https://replit.com/@jmitchell59/Exam2