Phase 1 : Lexical Analysis Some Discussion

and Helpful Hints

Basic Steps

CoolLexer.lex
- Run lexer.JLex

CoolLexer.java
- Compile CoolLexer.lex

Run lexer.Lexer
- Calls getLexer() of StudentLexerFactory
  - Calls CoolLexer() and returns as MyLexer

CoolLexer.lex

- Add the imports

- Add reference to the interface MyLexer

- Define keywords and Identifiers

- Accept keyword, remember that you can have multiple final states but the Lexer matches

Keywords

Keywords:

PLUS = "+"

MINUS = "-"

MULT = "*"

DIV = "/"

State Transitions

The state Transitions can be done in the following ways:

<YYINITIAL>{IF}   { return new Symbol(TokenConstants.IF); }

Remain in the same state.

<COMMENTBLOCK>{ENDCOMMENT}   {yybegin(YYINITIAL);}

Or Shift from one state to another e.g. in the above case we shifted from

   COMMENTBLOCK to YYINITIAL

Testing

- testCasesLexer has a lot of .cl files to test your program on.

- The reference to compare it with would be the lexer binary

  file in the bin folder of your repository.