**MAIN STEPS:**

1. Check for “Structure Errors”
2. Get all “decs”
3. Get the program black (between “being” and “end”)
4. “evaluateLineByLine” program block
5. If success by evaluation, done

**STRUCTURE ERRORS:**

1. Look for “program”
2. Look for “begin” and “end”
3. Look for “decs”
4. Look for “[“ and closing “]”
5. Check for “(expression)” after “if” and “while”
6. Look for “then” after “if”
7. Look for undeclared variables
   1. ANY non-keyword
      1. Should be a “dec” or should be “” quotes after a print
8. Look for open and close comments “/\*” and “\*/”

**PROGRAM BLOCK FUNCTIONS:**

1. Block Evaluations
   1. evaluateLineByLine(block)
   2. evaluateWhile(subBlock)
2. Line Evaluations
   1. evaluateExpression(line)
   2. evaluateIf(subBlock)
   3. evaluateWhile(subBlock)
   4. evaluatePrint(line)
   5. evaluateInput(line)
   6. evaluateIf(line)
   7. evaluateComment(line)
   8. evaluateStop(line)
3. Token Evaluations
   1. evaluateFirstToken(token)

**Evaluate Line by Line:**

1. Queue each line
2. Get first token
3. evaluateFirstToken(token)
4. Go to ‘next’ line evaluating next item in the Queue (as per token evaluation, example - for ‘if’ token it might be a set of lines).
5. Repeat step 1.

**Evaluate First Token:**

Switch(firstToken)

1. A “dec” variable – evaluateExpression(line)
2. “print” – evaluatePrint(line)
3. “input” -
4. “if” -
5. “while” -
6. “/\*” -
7. “stop” -

Evaluate Dec:

Check for: