|  |  |
| --- | --- |
| Successful Parse Code Block | Log Results |
| {}$ | Beginning Lexing Session... \*Stings Treated As CharList\*  LEXER --> | T\_OPENING\_BRACE [ { ] on line 1...  LEXER --> | T\_CLOSING\_BRACE [ } ] on line 1...  LEXER --> | T\_EOPS [ $ ] on line 1...  Lex Completed With 0 WARNING(S) and 0 ERROR(S)...  Beginning Parsing Session...  PARSER --> | PASSED! Expecting [ T\_OPENING\_BRACE ] found [ T\_OPENING\_BRACE ] on line 1...  PARSER --> | PASSED! λ production on line 1...  PARSER --> | PASSED! Expecting [ T\_CLOSING\_BRACE ] found [ T\_CLOSING\_BRACE ] on line 1...  PARSER --> | PASSED! Expecting [ T\_EOPS ] found [ T\_EOPS ] on line 1...  Parse Completed With 0 WARNING(S) and 0 ERROR(S)... |
| {  print("there is no spoon")  }$ | Beginning Lexing Session... \*Stings Treated As CharList\*  LEXER --> | T\_OPENING\_BRACE [ { ] on line 1...  LEXER --> | T\_PRINT [ print ] on line 2...  LEXER --> | T\_OPENING\_PARENTHESIS [ ( ] on line 2...  LEXER --> | T\_QUOTE [ " ] on line 2...  LEXER --> | T\_CHAR [ t ] on line 2...  LEXER --> | T\_CHAR [ h ] on line 2...  LEXER --> | T\_CHAR [ e ] on line 2...  LEXER --> | T\_CHAR [ r ] on line 2...  LEXER --> | T\_CHAR [ e ] on line 2...  LEXER --> | T\_CHAR [ ] on line 2...  LEXER --> | T\_CHAR [ i ] on line 2...  LEXER --> | T\_CHAR [ s ] on line 2...  LEXER --> | T\_CHAR [ ] on line 2...  LEXER --> | T\_CHAR [ n ] on line 2...  LEXER --> | T\_CHAR [ o ] on line 2...  LEXER --> | T\_CHAR [ ] on line 2...  LEXER --> | T\_CHAR [ s ] on line 2...  LEXER --> | T\_CHAR [ p ] on line 2...  LEXER --> | T\_CHAR [ o ] on line 2...  LEXER --> | T\_CHAR [ o ] on line 2...  LEXER --> | T\_CHAR [ n ] on line 2...  LEXER --> | T\_QUOTE [ " ] on line 2...  LEXER --> | T\_CLOSING\_PARENTHESIS [ ) ] on line 2...  LEXER --> | T\_CLOSING\_BRACE [ } ] on line 3...  LEXER --> | T\_EOPS [ $ ] on line 3...  Lex Completed With 0 WARNING(S) and 0 ERROR(S)...  Beginning Parsing Session...  PARSER --> | PASSED! Expecting [ T\_OPENING\_BRACE ] found [ T\_OPENING\_BRACE ] on line 1...  PARSER --> | PASSED! Expecting [ Statement ] found [ Statement ] on line 2...  PARSER --> | PASSED! Expecting [ PrintStatement ] found [ T\_PRINT ] on line 2...  PARSER --> | PASSED! Expecting [ T\_PRINT ] found [ T\_PRINT ] on line 2...  PARSER --> | PASSED! Expecting [ T\_OPENING\_PARENTHESIS ] found [ T\_OPENING\_PARENTHESIS ] on line 2...  PARSER --> | PASSED! Expecting [ Expr ] found [ StringExpr ] on line 2...  PARSER --> | PASSED! Expecting [ T\_QUOTE ] found [ T\_QUOTE ] on line 2...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 2...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ t ] on line 2...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 2...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ h ] on line 2...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 2...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ e ] on line 2...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 2...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ r ] on line 2...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 2...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ e ] on line 2...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 2...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ ] on line 2...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 2...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ i ] on line 2...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 2...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ s ] on line 2...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 2...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ ] on line 2...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 2...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ n ] on line 2...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 2...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ o ] on line 2...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 2...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ ] on line 2...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 2...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ s ] on line 2...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 2...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ p ] on line 2...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 2...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ o ] on line 2...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 2...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ o ] on line 2...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 2...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ n ] on line 2...  PARSER --> | PASSED! λ production on line 2...  PARSER --> | PASSED! Expecting [ T\_QUOTE ] found [ T\_QUOTE ] on line 2...  PARSER --> | PASSED! Expecting [ T\_CLOSING\_PARENTHESIS ] found [ T\_CLOSING\_PARENTHESIS ] on line 2...  PARSER --> | PASSED! λ production on line 3...  PARSER --> | PASSED! Expecting [ T\_CLOSING\_BRACE ] found [ T\_CLOSING\_BRACE ] on line 3...  PARSER --> | PASSED! Expecting [ T\_EOPS ] found [ T\_EOPS ] on line 3...  Parse Completed With 0 WARNING(S) and 0 ERROR(S)... |
| {  print((false == true))  print((true != true))  print((false != false))  print((false != true))  } | Beginning Lexing Session... \*Stings Treated As CharList\*  LEXER --> | T\_OPENING\_BRACE [ { ] on line 1...  LEXER --> | T\_PRINT [ print ] on line 2...  LEXER --> | T\_OPENING\_PARENTHESIS [ ( ] on line 2...  LEXER --> | T\_OPENING\_PARENTHESIS [ ( ] on line 2...  LEXER --> | T\_BOOLEAN\_VALUE [ false ] on line 2...  LEXER --> | T\_EQUALITY\_OP [ == ] on line 2...  LEXER --> | T\_BOOLEAN\_VALUE [ true ] on line 2...  LEXER --> | T\_CLOSING\_PARENTHESIS [ ) ] on line 2...  LEXER --> | T\_CLOSING\_PARENTHESIS [ ) ] on line 2...  LEXER --> | T\_PRINT [ print ] on line 3...  LEXER --> | T\_OPENING\_PARENTHESIS [ ( ] on line 3...  LEXER --> | T\_OPENING\_PARENTHESIS [ ( ] on line 3...  LEXER --> | T\_BOOLEAN\_VALUE [ true ] on line 3...  LEXER --> | T\_INEQUALITY\_OP [ != ] on line 3...  LEXER --> | T\_BOOLEAN\_VALUE [ true ] on line 3...  LEXER --> | T\_CLOSING\_PARENTHESIS [ ) ] on line 3...  LEXER --> | T\_CLOSING\_PARENTHESIS [ ) ] on line 3...  LEXER --> | T\_PRINT [ print ] on line 4...  LEXER --> | T\_OPENING\_PARENTHESIS [ ( ] on line 4...  LEXER --> | T\_OPENING\_PARENTHESIS [ ( ] on line 4...  LEXER --> | T\_BOOLEAN\_VALUE [ false ] on line 4...  LEXER --> | T\_INEQUALITY\_OP [ != ] on line 4...  LEXER --> | T\_BOOLEAN\_VALUE [ false ] on line 4...  LEXER --> | T\_CLOSING\_PARENTHESIS [ ) ] on line 4...  LEXER --> | T\_CLOSING\_PARENTHESIS [ ) ] on line 4...  LEXER --> | T\_PRINT [ print ] on line 5...  LEXER --> | T\_OPENING\_PARENTHESIS [ ( ] on line 5...  LEXER --> | T\_OPENING\_PARENTHESIS [ ( ] on line 5...  LEXER --> | T\_BOOLEAN\_VALUE [ false ] on line 5...  LEXER --> | T\_INEQUALITY\_OP [ != ] on line 5...  LEXER --> | T\_BOOLEAN\_VALUE [ true ] on line 5...  LEXER --> | T\_CLOSING\_PARENTHESIS [ ) ] on line 5...  LEXER --> | T\_CLOSING\_PARENTHESIS [ ) ] on line 5...  LEXER --> | T\_CLOSING\_BRACE [ } ] on line 6...  LEXER --> | WARNING! NO EOPS [$] detected. Added to end-of-file at line 6...  Lex Completed With 1 WARNING(S) and 0 ERROR(S)...  Beginning Parsing Session...  PARSER --> | PASSED! Expecting [ T\_OPENING\_BRACE ] found [ T\_OPENING\_BRACE ] on line 1...  PARSER --> | PASSED! Expecting [ Statement ] found [ Statement ] on line 2...  PARSER --> | PASSED! Expecting [ PrintStatement ] found [ T\_PRINT ] on line 2...  PARSER --> | PASSED! Expecting [ T\_PRINT ] found [ T\_PRINT ] on line 2...  PARSER --> | PASSED! Expecting [ T\_OPENING\_PARENTHESIS ] found [ T\_OPENING\_PARENTHESIS ] on line 2...  PARSER --> | PASSED! Expecting [ Expr ] found [ BooleanExpr ] on line 2...  PARSER --> | PASSED! Expecting [ T\_OPENING\_PARENTHESIS ] found [ ( ] on line 2...  PARSER --> | PASSED! Expecting [ Expr ] found [ BooleanExpr ] on line 2...  PARSER --> | PASSED! Expecting [ T\_BOOLEAN\_VALUE ] found [ T\_BOOLEAN\_VALUE ] on line 2...  PARSER --> | PASSED! Expecting [ T\_BOOLEAN\_VALUE ] found [ false ] on line 2...  PARSER --> | PASSED! Expecting [ T\_EQUALITY\_OP ] found [ == ] on line 2...  PARSER --> | PASSED! Expecting [ Expr ] found [ BooleanExpr ] on line 2...  PARSER --> | PASSED! Expecting [ T\_BOOLEAN\_VALUE ] found [ T\_BOOLEAN\_VALUE ] on line 2...  PARSER --> | PASSED! Expecting [ T\_BOOLEAN\_VALUE ] found [ true ] on line 2...  PARSER --> | PASSED! Expecting [ T\_CLOSING\_PARENTHESIS ] found [ ) ] on line 2...  PARSER --> | PASSED! Expecting [ T\_CLOSING\_PARENTHESIS ] found [ T\_CLOSING\_PARENTHESIS ] on line 2...  PARSER --> | PASSED! Expecting [ StatementList ] found [ Statement ] on line 3...  PARSER --> | PASSED! Expecting [ Statement ] found [ Statement ] on line 3...  PARSER --> | PASSED! Expecting [ PrintStatement ] found [ T\_PRINT ] on line 3...  PARSER --> | PASSED! Expecting [ T\_PRINT ] found [ T\_PRINT ] on line 3...  PARSER --> | PASSED! Expecting [ T\_OPENING\_PARENTHESIS ] found [ T\_OPENING\_PARENTHESIS ] on line 3...  PARSER --> | PASSED! Expecting [ Expr ] found [ BooleanExpr ] on line 3...  PARSER --> | PASSED! Expecting [ T\_OPENING\_PARENTHESIS ] found [ ( ] on line 3...  PARSER --> | PASSED! Expecting [ Expr ] found [ BooleanExpr ] on line 3...  PARSER --> | PASSED! Expecting [ T\_BOOLEAN\_VALUE ] found [ T\_BOOLEAN\_VALUE ] on line 3...  PARSER --> | PASSED! Expecting [ T\_BOOLEAN\_VALUE ] found [ true ] on line 3...  PARSER --> | PASSED! Expecting [ T\_INEQUALITY\_OP ] found [ != ] on line 3...  PARSER --> | PASSED! Expecting [ Expr ] found [ BooleanExpr ] on line 3...  PARSER --> | PASSED! Expecting [ T\_BOOLEAN\_VALUE ] found [ T\_BOOLEAN\_VALUE ] on line 3...  PARSER --> | PASSED! Expecting [ T\_BOOLEAN\_VALUE ] found [ true ] on line 3...  PARSER --> | PASSED! Expecting [ T\_CLOSING\_PARENTHESIS ] found [ ) ] on line 3...  PARSER --> | PASSED! Expecting [ T\_CLOSING\_PARENTHESIS ] found [ T\_CLOSING\_PARENTHESIS ] on line 3...  PARSER --> | PASSED! Expecting [ StatementList ] found [ Statement ] on line 4...  PARSER --> | PASSED! Expecting [ Statement ] found [ Statement ] on line 4...  PARSER --> | PASSED! Expecting [ PrintStatement ] found [ T\_PRINT ] on line 4...  PARSER --> | PASSED! Expecting [ T\_PRINT ] found [ T\_PRINT ] on line 4...  PARSER --> | PASSED! Expecting [ T\_OPENING\_PARENTHESIS ] found [ T\_OPENING\_PARENTHESIS ] on line 4...  PARSER --> | PASSED! Expecting [ Expr ] found [ BooleanExpr ] on line 4...  PARSER --> | PASSED! Expecting [ T\_OPENING\_PARENTHESIS ] found [ ( ] on line 4...  PARSER --> | PASSED! Expecting [ Expr ] found [ BooleanExpr ] on line 4...  PARSER --> | PASSED! Expecting [ T\_BOOLEAN\_VALUE ] found [ T\_BOOLEAN\_VALUE ] on line 4...  PARSER --> | PASSED! Expecting [ T\_BOOLEAN\_VALUE ] found [ false ] on line 4...  PARSER --> | PASSED! Expecting [ T\_INEQUALITY\_OP ] found [ != ] on line 4...  PARSER --> | PASSED! Expecting [ Expr ] found [ BooleanExpr ] on line 4...  PARSER --> | PASSED! Expecting [ T\_BOOLEAN\_VALUE ] found [ T\_BOOLEAN\_VALUE ] on line 4...  PARSER --> | PASSED! Expecting [ T\_BOOLEAN\_VALUE ] found [ false ] on line 4...  PARSER --> | PASSED! Expecting [ T\_CLOSING\_PARENTHESIS ] found [ ) ] on line 4...  PARSER --> | PASSED! Expecting [ T\_CLOSING\_PARENTHESIS ] found [ T\_CLOSING\_PARENTHESIS ] on line 4...  PARSER --> | PASSED! Expecting [ StatementList ] found [ Statement ] on line 5...  PARSER --> | PASSED! Expecting [ Statement ] found [ Statement ] on line 5...  PARSER --> | PASSED! Expecting [ PrintStatement ] found [ T\_PRINT ] on line 5...  PARSER --> | PASSED! Expecting [ T\_PRINT ] found [ T\_PRINT ] on line 5...  PARSER --> | PASSED! Expecting [ T\_OPENING\_PARENTHESIS ] found [ T\_OPENING\_PARENTHESIS ] on line 5...  PARSER --> | PASSED! Expecting [ Expr ] found [ BooleanExpr ] on line 5...  PARSER --> | PASSED! Expecting [ T\_OPENING\_PARENTHESIS ] found [ ( ] on line 5...  PARSER --> | PASSED! Expecting [ Expr ] found [ BooleanExpr ] on line 5...  PARSER --> | PASSED! Expecting [ T\_BOOLEAN\_VALUE ] found [ T\_BOOLEAN\_VALUE ] on line 5...  PARSER --> | PASSED! Expecting [ T\_BOOLEAN\_VALUE ] found [ false ] on line 5...  PARSER --> | PASSED! Expecting [ T\_INEQUALITY\_OP ] found [ != ] on line 5...  PARSER --> | PASSED! Expecting [ Expr ] found [ BooleanExpr ] on line 5...  PARSER --> | PASSED! Expecting [ T\_BOOLEAN\_VALUE ] found [ T\_BOOLEAN\_VALUE ] on line 5...  PARSER --> | PASSED! Expecting [ T\_BOOLEAN\_VALUE ] found [ true ] on line 5...  PARSER --> | PASSED! Expecting [ T\_CLOSING\_PARENTHESIS ] found [ ) ] on line 5...  PARSER --> | PASSED! Expecting [ T\_CLOSING\_PARENTHESIS ] found [ T\_CLOSING\_PARENTHESIS ] on line 5...  PARSER --> | PASSED! λ production on line 6...  PARSER --> | PASSED! Expecting [ T\_CLOSING\_BRACE ] found [ T\_CLOSING\_BRACE ] on line 6...  PARSER --> | PASSED! Expecting [ T\_EOPS ] found [ T\_EOPS ] on line 6...  Parse Completed With 0 WARNING(S) and 0 ERROR(S)... |
| {  int a  int b  a = 0  b = 0  while (a != 3) {  print(a)  while (b != 3) {  print(b)  b = 1 + b  if (b == 2) {  print("there is no spoon")  }  }  b = 0  a = 1 + a  }  }$ | Beginning Lexing Session... \*Stings Treated As CharList\*  LEXER --> | T\_OPENING\_BRACE [ { ] on line 1...  LEXER --> | T\_VARIABLE\_TYPE [ int ] on line 2...  LEXER --> | T\_ID [ a ] on line 2...  LEXER --> | T\_VARIABLE\_TYPE [ int ] on line 3...  LEXER --> | T\_ID [ b ] on line 3...  LEXER --> | T\_ID [ a ] on line 5...  LEXER --> | T\_ASSIGNMENT\_OP [ = ] on line 5...  LEXER --> | T\_DIGIT [ 0 ] on line 5...  LEXER --> | T\_ID [ b ] on line 6...  LEXER --> | T\_ASSIGNMENT\_OP [ = ] on line 6...  LEXER --> | T\_DIGIT [ 0 ] on line 6...  LEXER --> | T\_WHILE [ while ] on line 8...  LEXER --> | T\_OPENING\_PARENTHESIS [ ( ] on line 8...  LEXER --> | T\_ID [ a ] on line 8...  LEXER --> | T\_INEQUALITY\_OP [ != ] on line 8...  LEXER --> | T\_DIGIT [ 3 ] on line 8...  LEXER --> | T\_CLOSING\_PARENTHESIS [ ) ] on line 8...  LEXER --> | T\_OPENING\_BRACE [ { ] on line 8...  LEXER --> | T\_PRINT [ print ] on line 9...  LEXER --> | T\_OPENING\_PARENTHESIS [ ( ] on line 9...  LEXER --> | T\_ID [ a ] on line 9...  LEXER --> | T\_CLOSING\_PARENTHESIS [ ) ] on line 9...  LEXER --> | T\_WHILE [ while ] on line 10...  LEXER --> | T\_OPENING\_PARENTHESIS [ ( ] on line 10...  LEXER --> | T\_ID [ b ] on line 10...  LEXER --> | T\_INEQUALITY\_OP [ != ] on line 10...  LEXER --> | T\_DIGIT [ 3 ] on line 10...  LEXER --> | T\_CLOSING\_PARENTHESIS [ ) ] on line 10...  LEXER --> | T\_OPENING\_BRACE [ { ] on line 10...  LEXER --> | T\_PRINT [ print ] on line 11...  LEXER --> | T\_OPENING\_PARENTHESIS [ ( ] on line 11...  LEXER --> | T\_ID [ b ] on line 11...  LEXER --> | T\_CLOSING\_PARENTHESIS [ ) ] on line 11...  LEXER --> | T\_ID [ b ] on line 12...  LEXER --> | T\_ASSIGNMENT\_OP [ = ] on line 12...  LEXER --> | T\_DIGIT [ 1 ] on line 12...  LEXER --> | T\_ADDITION\_OP [ + ] on line 12...  LEXER --> | T\_ID [ b ] on line 12...  LEXER --> | T\_IF [ if ] on line 13...  LEXER --> | T\_OPENING\_PARENTHESIS [ ( ] on line 13...  LEXER --> | T\_ID [ b ] on line 13...  LEXER --> | T\_EQUALITY\_OP [ == ] on line 13...  LEXER --> | T\_DIGIT [ 2 ] on line 13...  LEXER --> | T\_CLOSING\_PARENTHESIS [ ) ] on line 13...  LEXER --> | T\_OPENING\_BRACE [ { ] on line 13...  LEXER --> | T\_PRINT [ print ] on line 14...  LEXER --> | T\_OPENING\_PARENTHESIS [ ( ] on line 14...  LEXER --> | T\_QUOTE [ " ] on line 14...  LEXER --> | T\_CHAR [ t ] on line 14...  LEXER --> | T\_CHAR [ h ] on line 14...  LEXER --> | T\_CHAR [ e ] on line 14...  LEXER --> | T\_CHAR [ r ] on line 14...  LEXER --> | T\_CHAR [ e ] on line 14...  LEXER --> | T\_CHAR [ ] on line 14...  LEXER --> | T\_CHAR [ i ] on line 14...  LEXER --> | T\_CHAR [ s ] on line 14...  LEXER --> | T\_CHAR [ ] on line 14...  LEXER --> | T\_CHAR [ n ] on line 14...  LEXER --> | T\_CHAR [ o ] on line 14...  LEXER --> | T\_CHAR [ ] on line 14...  LEXER --> | T\_CHAR [ s ] on line 14...  LEXER --> | T\_CHAR [ p ] on line 14...  LEXER --> | T\_CHAR [ o ] on line 14...  LEXER --> | T\_CHAR [ o ] on line 14...  LEXER --> | T\_CHAR [ n ] on line 14...  LEXER --> | T\_QUOTE [ " ] on line 14...  LEXER --> | T\_CLOSING\_PARENTHESIS [ ) ] on line 14...  LEXER --> | T\_CLOSING\_BRACE [ } ] on line 15...  LEXER --> | T\_CLOSING\_BRACE [ } ] on line 16...  LEXER --> | T\_ID [ b ] on line 18...  LEXER --> | T\_ASSIGNMENT\_OP [ = ] on line 18...  LEXER --> | T\_DIGIT [ 0 ] on line 18...  LEXER --> | T\_ID [ a ] on line 19...  LEXER --> | T\_ASSIGNMENT\_OP [ = ] on line 19...  LEXER --> | T\_DIGIT [ 1 ] on line 19...  LEXER --> | T\_ADDITION\_OP [ + ] on line 19...  LEXER --> | T\_ID [ a ] on line 19...  LEXER --> | T\_CLOSING\_BRACE [ } ] on line 20...  LEXER --> | T\_CLOSING\_BRACE [ } ] on line 21...  LEXER --> | T\_EOPS [ $ ] on line 21...  Lex Completed With 0 WARNING(S) and 0 ERROR(S)...  Beginning Parsing Session...  PARSER --> | PASSED! Expecting [ T\_OPENING\_BRACE ] found [ T\_OPENING\_BRACE ] on line 1...  PARSER --> | PASSED! Expecting [ Statement ] found [ Statement ] on line 2...  PARSER --> | PASSED! Expecting [ VarDecl ] found [ T\_VARIABLE\_TYPE ] on line 2...  PARSER --> | PASSED! Expecting [ T\_VARIABLE\_TYPE ] found [ T\_VARIABLE\_TYPE ] on line 2...  PARSER --> | PASSED! Expecting [ T\_VARIABLE\_TYPE ] found [ int ] on line 2...  PARSER --> | PASSED! Expecting [ T\_ID ] found [ T\_ID ] on line 2...  PARSER --> | PASSED! Expecting [ T\_ID ] found [ a ] on line 2...  PARSER --> | PASSED! Expecting [ StatementList ] found [ Statement ] on line 3...  PARSER --> | PASSED! Expecting [ Statement ] found [ Statement ] on line 3...  PARSER --> | PASSED! Expecting [ VarDecl ] found [ T\_VARIABLE\_TYPE ] on line 3...  PARSER --> | PASSED! Expecting [ T\_VARIABLE\_TYPE ] found [ T\_VARIABLE\_TYPE ] on line 3...  PARSER --> | PASSED! Expecting [ T\_VARIABLE\_TYPE ] found [ int ] on line 3...  PARSER --> | PASSED! Expecting [ T\_ID ] found [ T\_ID ] on line 3...  PARSER --> | PASSED! Expecting [ T\_ID ] found [ b ] on line 3...  PARSER --> | PASSED! Expecting [ StatementList ] found [ Statement ] on line 5...  PARSER --> | PASSED! Expecting [ Statement ] found [ Statement ] on line 5...  PARSER --> | PASSED! Expecting [ AssignmentStatement ] found [ T\_ID ] on line 5...  PARSER --> | PASSED! Expecting [ T\_ID ] found [ T\_ID ] on line 5...  PARSER --> | PASSED! Expecting [ T\_ID ] found [ a ] on line 5...  PARSER --> | PASSED! Expecting [ T\_ASSIGNMENT\_OP ] found [ = ] on line 5...  PARSER --> | PASSED! Expecting [ Expr ] found [ IntExpr ] on line 5...  PARSER --> | PASSED! Expecting [ IntExpr ] found [ IntExpr ] on line 5...  PARSER --> | PASSED! Expecting [ T\_DIGIT ] found [ 0 ] on line 5...  PARSER --> | PASSED! Expecting [ StatementList ] found [ Statement ] on line 6...  PARSER --> | PASSED! Expecting [ Statement ] found [ Statement ] on line 6...  PARSER --> | PASSED! Expecting [ AssignmentStatement ] found [ T\_ID ] on line 6...  PARSER --> | PASSED! Expecting [ T\_ID ] found [ T\_ID ] on line 6...  PARSER --> | PASSED! Expecting [ T\_ID ] found [ b ] on line 6...  PARSER --> | PASSED! Expecting [ T\_ASSIGNMENT\_OP ] found [ = ] on line 6...  PARSER --> | PASSED! Expecting [ Expr ] found [ IntExpr ] on line 6...  PARSER --> | PASSED! Expecting [ IntExpr ] found [ IntExpr ] on line 6...  PARSER --> | PASSED! Expecting [ T\_DIGIT ] found [ 0 ] on line 6...  PARSER --> | PASSED! Expecting [ StatementList ] found [ Statement ] on line 8...  PARSER --> | PASSED! Expecting [ Statement ] found [ Statement ] on line 8...  PARSER --> | PASSED! Expecting [ WhileStatement ] found [ T\_WHILE ] on line 8...  PARSER --> | PASSED! Expecting [ T\_WHILE ] found [ while ] on line 8...  PARSER --> | PASSED! Expecting [ T\_OPENING\_PARENTHESIS ] found [ ( ] on line 8...  PARSER --> | PASSED! Expecting [ Expr ] found [ Id ] on line 8...  PARSER --> | PASSED! Expecting [ T\_ID ] found [ a ] on line 8...  PARSER --> | PASSED! Expecting [ T\_INEQUALITY\_OP ] found [ != ] on line 8...  PARSER --> | PASSED! Expecting [ Expr ] found [ IntExpr ] on line 8...  PARSER --> | PASSED! Expecting [ IntExpr ] found [ IntExpr ] on line 8...  PARSER --> | PASSED! Expecting [ T\_DIGIT ] found [ 3 ] on line 8...  PARSER --> | PASSED! Expecting [ T\_CLOSING\_PARENTHESIS ] found [ ) ] on line 8...  PARSER --> | PASSED! Expecting [ T\_OPENING\_BRACE ] found [ T\_OPENING\_BRACE ] on line 8...  PARSER --> | PASSED! Expecting [ Statement ] found [ Statement ] on line 9...  PARSER --> | PASSED! Expecting [ PrintStatement ] found [ T\_PRINT ] on line 9...  PARSER --> | PASSED! Expecting [ T\_PRINT ] found [ T\_PRINT ] on line 9...  PARSER --> | PASSED! Expecting [ T\_OPENING\_PARENTHESIS ] found [ T\_OPENING\_PARENTHESIS ] on line 9...  PARSER --> | PASSED! Expecting [ Expr ] found [ Id ] on line 9...  PARSER --> | PASSED! Expecting [ T\_ID ] found [ a ] on line 9...  PARSER --> | PASSED! Expecting [ T\_CLOSING\_PARENTHESIS ] found [ T\_CLOSING\_PARENTHESIS ] on line 9...  PARSER --> | PASSED! Expecting [ StatementList ] found [ Statement ] on line 10...  PARSER --> | PASSED! Expecting [ Statement ] found [ Statement ] on line 10...  PARSER --> | PASSED! Expecting [ WhileStatement ] found [ T\_WHILE ] on line 10...  PARSER --> | PASSED! Expecting [ T\_WHILE ] found [ while ] on line 10...  PARSER --> | PASSED! Expecting [ T\_OPENING\_PARENTHESIS ] found [ ( ] on line 10...  PARSER --> | PASSED! Expecting [ Expr ] found [ Id ] on line 10...  PARSER --> | PASSED! Expecting [ T\_ID ] found [ b ] on line 10...  PARSER --> | PASSED! Expecting [ T\_INEQUALITY\_OP ] found [ != ] on line 10...  PARSER --> | PASSED! Expecting [ Expr ] found [ IntExpr ] on line 10...  PARSER --> | PASSED! Expecting [ IntExpr ] found [ IntExpr ] on line 10...  PARSER --> | PASSED! Expecting [ T\_DIGIT ] found [ 3 ] on line 10...  PARSER --> | PASSED! Expecting [ T\_CLOSING\_PARENTHESIS ] found [ ) ] on line 10...  PARSER --> | PASSED! Expecting [ T\_OPENING\_BRACE ] found [ T\_OPENING\_BRACE ] on line 10...  PARSER --> | PASSED! Expecting [ Statement ] found [ Statement ] on line 11...  PARSER --> | PASSED! Expecting [ PrintStatement ] found [ T\_PRINT ] on line 11...  PARSER --> | PASSED! Expecting [ T\_PRINT ] found [ T\_PRINT ] on line 11...  PARSER --> | PASSED! Expecting [ T\_OPENING\_PARENTHESIS ] found [ T\_OPENING\_PARENTHESIS ] on line 11...  PARSER --> | PASSED! Expecting [ Expr ] found [ Id ] on line 11...  PARSER --> | PASSED! Expecting [ T\_ID ] found [ b ] on line 11...  PARSER --> | PASSED! Expecting [ T\_CLOSING\_PARENTHESIS ] found [ T\_CLOSING\_PARENTHESIS ] on line 11...  PARSER --> | PASSED! Expecting [ StatementList ] found [ Statement ] on line 12...  PARSER --> | PASSED! Expecting [ Statement ] found [ Statement ] on line 12...  PARSER --> | PASSED! Expecting [ AssignmentStatement ] found [ T\_ID ] on line 12...  PARSER --> | PASSED! Expecting [ T\_ID ] found [ T\_ID ] on line 12...  PARSER --> | PASSED! Expecting [ T\_ID ] found [ b ] on line 12...  PARSER --> | PASSED! Expecting [ T\_ASSIGNMENT\_OP ] found [ = ] on line 12...  PARSER --> | PASSED! Expecting [ Expr ] found [ IntExpr ] on line 12...  PARSER --> | PASSED! Expecting [ IntExpr ] found [ T\_DIGIT ] on line 12...  PARSER --> | PASSED! Expecting [ T\_DIGIT ] found [ 1 ] on line 12...  PARSER --> | PASSED! Expecting [ T\_ADDITION\_OP ] found [ + ] on line 12...  PARSER --> | PASSED! Expecting [ Expr ] found [ Id ] on line 12...  PARSER --> | PASSED! Expecting [ T\_ID ] found [ b ] on line 12...  PARSER --> | PASSED! Expecting [ StatementList ] found [ Statement ] on line 13...  PARSER --> | PASSED! Expecting [ Statement ] found [ Statement ] on line 13...  PARSER --> | PASSED! Expecting [ IfStatement ] found [ T\_IF ] on line 13...  PARSER --> | PASSED! Expecting [ T\_IF ] found [ if ] on line 13...  PARSER --> | PASSED! Expecting [ T\_OPENING\_PARENTHESIS ] found [ ( ] on line 13...  PARSER --> | PASSED! Expecting [ Expr ] found [ Id ] on line 13...  PARSER --> | PASSED! Expecting [ T\_ID ] found [ b ] on line 13...  PARSER --> | PASSED! Expecting [ T\_EQUALITY\_OP ] found [ == ] on line 13...  PARSER --> | PASSED! Expecting [ Expr ] found [ IntExpr ] on line 13...  PARSER --> | PASSED! Expecting [ IntExpr ] found [ IntExpr ] on line 13...  PARSER --> | PASSED! Expecting [ T\_DIGIT ] found [ 2 ] on line 13...  PARSER --> | PASSED! Expecting [ T\_CLOSING\_PARENTHESIS ] found [ ) ] on line 13...  PARSER --> | PASSED! Expecting [ T\_OPENING\_BRACE ] found [ T\_OPENING\_BRACE ] on line 13...  PARSER --> | PASSED! Expecting [ Statement ] found [ Statement ] on line 14...  PARSER --> | PASSED! Expecting [ PrintStatement ] found [ T\_PRINT ] on line 14...  PARSER --> | PASSED! Expecting [ T\_PRINT ] found [ T\_PRINT ] on line 14...  PARSER --> | PASSED! Expecting [ T\_OPENING\_PARENTHESIS ] found [ T\_OPENING\_PARENTHESIS ] on line 14...  PARSER --> | PASSED! Expecting [ Expr ] found [ StringExpr ] on line 14...  PARSER --> | PASSED! Expecting [ T\_QUOTE ] found [ T\_QUOTE ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ t ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ h ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ e ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ r ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ e ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ i ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ s ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ n ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ o ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ s ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ p ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ o ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ o ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ n ] on line 14...  PARSER --> | PASSED! λ production on line 14...  PARSER --> | PASSED! Expecting [ T\_QUOTE ] found [ T\_QUOTE ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CLOSING\_PARENTHESIS ] found [ T\_CLOSING\_PARENTHESIS ] on line 14...  PARSER --> | PASSED! λ production on line 15...  PARSER --> | PASSED! Expecting [ T\_CLOSING\_BRACE ] found [ T\_CLOSING\_BRACE ] on line 15...  PARSER --> | PASSED! λ production on line 16...  PARSER --> | PASSED! Expecting [ T\_CLOSING\_BRACE ] found [ T\_CLOSING\_BRACE ] on line 16...  PARSER --> | PASSED! Expecting [ StatementList ] found [ Statement ] on line 18...  PARSER --> | PASSED! Expecting [ Statement ] found [ Statement ] on line 18...  PARSER --> | PASSED! Expecting [ AssignmentStatement ] found [ T\_ID ] on line 18...  PARSER --> | PASSED! Expecting [ T\_ID ] found [ T\_ID ] on line 18...  PARSER --> | PASSED! Expecting [ T\_ID ] found [ b ] on line 18...  PARSER --> | PASSED! Expecting [ T\_ASSIGNMENT\_OP ] found [ = ] on line 18...  PARSER --> | PASSED! Expecting [ Expr ] found [ IntExpr ] on line 18...  PARSER --> | PASSED! Expecting [ IntExpr ] found [ IntExpr ] on line 18...  PARSER --> | PASSED! Expecting [ T\_DIGIT ] found [ 0 ] on line 18...  PARSER --> | PASSED! Expecting [ StatementList ] found [ Statement ] on line 19...  PARSER --> | PASSED! Expecting [ Statement ] found [ Statement ] on line 19...  PARSER --> | PASSED! Expecting [ AssignmentStatement ] found [ T\_ID ] on line 19...  PARSER --> | PASSED! Expecting [ T\_ID ] found [ T\_ID ] on line 19...  PARSER --> | PASSED! Expecting [ T\_ID ] found [ a ] on line 19...  PARSER --> | PASSED! Expecting [ T\_ASSIGNMENT\_OP ] found [ = ] on line 19...  PARSER --> | PASSED! Expecting [ Expr ] found [ IntExpr ] on line 19...  PARSER --> | PASSED! Expecting [ IntExpr ] found [ T\_DIGIT ] on line 19...  PARSER --> | PASSED! Expecting [ T\_DIGIT ] found [ 1 ] on line 19...  PARSER --> | PASSED! Expecting [ T\_ADDITION\_OP ] found [ + ] on line 19...  PARSER --> | PASSED! Expecting [ Expr ] found [ Id ] on line 19...  PARSER --> | PASSED! Expecting [ T\_ID ] found [ a ] on line 19...  PARSER --> | PASSED! λ production on line 20...  PARSER --> | PASSED! Expecting [ T\_CLOSING\_BRACE ] found [ T\_CLOSING\_BRACE ] on line 20...  PARSER --> | PASSED! λ production on line 21...  PARSER --> | PASSED! Expecting [ T\_CLOSING\_BRACE ] found [ T\_CLOSING\_BRACE ] on line 21...  PARSER --> | PASSED! Expecting [ T\_EOPS ] found [ T\_EOPS ] on line 21...  Parse Completed With 0 WARNING(S) and 0 ERROR(S)... |

|  |  |
| --- | --- |
| Failed Lex Code Block | Log Results |
| {  string 1  }$ | Beginning Lexing Session... \*Stings Treated As CharList\*  LEXER --> | T\_OPENING\_BRACE [ { ] on line 1...  LEXER --> | T\_VARIABLE\_TYPE [ string ] on line 2...  LEXER --> | T\_DIGIT [ 1 ] on line 2...  LEXER --> | T\_CLOSING\_BRACE [ } ] on line 3...  LEXER --> | T\_EOPS [ $ ] on line 3...  Lex Completed With 0 WARNING(S) and 0 ERROR(S)...  Beginning Parsing Session...  PARSER --> | PASSED! Expecting [ T\_OPENING\_BRACE ] found [ T\_OPENING\_BRACE ] on line 1...  PARSER --> | PASSED! Expecting [ Statement ] found [ Statement ] on line 2...  PARSER --> | PASSED! Expecting [ VarDecl ] found [ T\_VARIABLE\_TYPE ] on line 2...  PARSER --> | PASSED! Expecting [ T\_VARIABLE\_TYPE ] found [ T\_VARIABLE\_TYPE ] on line 2...  PARSER --> | PASSED! Expecting [ T\_VARIABLE\_TYPE ] found [ string ] on line 2...  PARSER --> | ERROR! Expecting [ T\_ID ] found [ 1 ] on line 2...  Parse Completed With 0 WARNING(S) and 1 ERROR(S)... |
| {  a + 3  }$ | Beginning Lexing Session... \*Stings Treated As CharList\*  LEXER --> | T\_OPENING\_BRACE [ { ] on line 1...  LEXER --> | T\_ID [ a ] on line 2...  LEXER --> | T\_ADDITION\_OP [ + ] on line 2...  LEXER --> | T\_DIGIT [ 3 ] on line 2...  LEXER --> | T\_CLOSING\_BRACE [ } ] on line 3...  LEXER --> | T\_EOPS [ $ ] on line 3...  Lex Completed With 0 WARNING(S) and 0 ERROR(S)...  Beginning Parsing Session...  PARSER --> | PASSED! Expecting [ T\_OPENING\_BRACE ] found [ T\_OPENING\_BRACE ] on line 1...  PARSER --> | PASSED! Expecting [ Statement ] found [ Statement ] on line 2...  PARSER --> | PASSED! Expecting [ AssignmentStatement ] found [ T\_ID ] on line 2...  PARSER --> | PASSED! Expecting [ T\_ID ] found [ T\_ID ] on line 2...  PARSER --> | PASSED! Expecting [ T\_ID ] found [ a ] on line 2...  PARSER --> | ERROR! Expecting [ = ] found [ + ] on line 2...  Parse Completed With 0 WARNING(S) and 1 ERROR(S)... |
| {  print($)  }$ | Beginning Lexing Session... \*Stings Treated As CharList\*  LEXER --> | T\_OPENING\_BRACE [ { ] on line 1...  LEXER --> | T\_PRINT [ print ] on line 2...  LEXER --> | T\_OPENING\_PARENTHESIS [ ( ] on line 2...  LEXER --> | T\_EOPS [ $ ] on line 2...  LEXER --> | T\_CLOSING\_PARENTHESIS [ ) ] on line 2...  LEXER --> | T\_CLOSING\_BRACE [ } ] on line 3...  LEXER --> | T\_EOPS [ $ ] on line 3...  Lex Completed With 0 WARNING(S) and 0 ERROR(S)...  Beginning Parsing Session...  PARSER --> | PASSED! Expecting [ T\_OPENING\_BRACE ] found [ T\_OPENING\_BRACE ] on line 1...  PARSER --> | PASSED! Expecting [ Statement ] found [ Statement ] on line 2...  PARSER --> | PASSED! Expecting [ PrintStatement ] found [ T\_PRINT ] on line 2...  PARSER --> | PASSED! Expecting [ T\_PRINT ] found [ T\_PRINT ] on line 2...  PARSER --> | PASSED! Expecting [ T\_OPENING\_PARENTHESIS ] found [ T\_OPENING\_PARENTHESIS ] on line 2...  PARSER --> | ERROR! Expecting [ IntExpr || StringExpr || BooleanExpr || Id ] found [ $ ] on line 2...  Parse Completed With 0 WARNING(S) and 1 ERROR(S)... |
| {  int a  int b  a = 0  b = 0  while (a != 3) {  print(a)  while (b != 3) {  print(b)  b = 1 + b  if (b == 2) {  print("there is no spoon")  }  }  b = 0  a = 1 +  }  }$ | Beginning Lexing Session... \*Stings Treated As CharList\*  LEXER --> | T\_OPENING\_BRACE [ { ] on line 1...  LEXER --> | T\_VARIABLE\_TYPE [ int ] on line 2...  LEXER --> | T\_ID [ a ] on line 2...  LEXER --> | T\_VARIABLE\_TYPE [ int ] on line 3...  LEXER --> | T\_ID [ b ] on line 3...  LEXER --> | T\_ID [ a ] on line 5...  LEXER --> | T\_ASSIGNMENT\_OP [ = ] on line 5...  LEXER --> | T\_DIGIT [ 0 ] on line 5...  LEXER --> | T\_ID [ b ] on line 6...  LEXER --> | T\_ASSIGNMENT\_OP [ = ] on line 6...  LEXER --> | T\_DIGIT [ 0 ] on line 6...  LEXER --> | T\_WHILE [ while ] on line 8...  LEXER --> | T\_OPENING\_PARENTHESIS [ ( ] on line 8...  LEXER --> | T\_ID [ a ] on line 8...  LEXER --> | T\_INEQUALITY\_OP [ != ] on line 8...  LEXER --> | T\_DIGIT [ 3 ] on line 8...  LEXER --> | T\_CLOSING\_PARENTHESIS [ ) ] on line 8...  LEXER --> | T\_OPENING\_BRACE [ { ] on line 8...  LEXER --> | T\_PRINT [ print ] on line 9...  LEXER --> | T\_OPENING\_PARENTHESIS [ ( ] on line 9...  LEXER --> | T\_ID [ a ] on line 9...  LEXER --> | T\_CLOSING\_PARENTHESIS [ ) ] on line 9...  LEXER --> | T\_WHILE [ while ] on line 10...  LEXER --> | T\_OPENING\_PARENTHESIS [ ( ] on line 10...  LEXER --> | T\_ID [ b ] on line 10...  LEXER --> | T\_INEQUALITY\_OP [ != ] on line 10...  LEXER --> | T\_DIGIT [ 3 ] on line 10...  LEXER --> | T\_CLOSING\_PARENTHESIS [ ) ] on line 10...  LEXER --> | T\_OPENING\_BRACE [ { ] on line 10...  LEXER --> | T\_PRINT [ print ] on line 11...  LEXER --> | T\_OPENING\_PARENTHESIS [ ( ] on line 11...  LEXER --> | T\_ID [ b ] on line 11...  LEXER --> | T\_CLOSING\_PARENTHESIS [ ) ] on line 11...  LEXER --> | T\_ID [ b ] on line 12...  LEXER --> | T\_ASSIGNMENT\_OP [ = ] on line 12...  LEXER --> | T\_DIGIT [ 1 ] on line 12...  LEXER --> | T\_ADDITION\_OP [ + ] on line 12...  LEXER --> | T\_ID [ b ] on line 12...  LEXER --> | T\_IF [ if ] on line 13...  LEXER --> | T\_OPENING\_PARENTHESIS [ ( ] on line 13...  LEXER --> | T\_ID [ b ] on line 13...  LEXER --> | T\_EQUALITY\_OP [ == ] on line 13...  LEXER --> | T\_DIGIT [ 2 ] on line 13...  LEXER --> | T\_CLOSING\_PARENTHESIS [ ) ] on line 13...  LEXER --> | T\_OPENING\_BRACE [ { ] on line 13...  LEXER --> | T\_PRINT [ print ] on line 14...  LEXER --> | T\_OPENING\_PARENTHESIS [ ( ] on line 14...  LEXER --> | T\_QUOTE [ " ] on line 14...  LEXER --> | T\_CHAR [ t ] on line 14...  LEXER --> | T\_CHAR [ h ] on line 14...  LEXER --> | T\_CHAR [ e ] on line 14...  LEXER --> | T\_CHAR [ r ] on line 14...  LEXER --> | T\_CHAR [ e ] on line 14...  LEXER --> | T\_CHAR [ ] on line 14...  LEXER --> | T\_CHAR [ i ] on line 14...  LEXER --> | T\_CHAR [ s ] on line 14...  LEXER --> | T\_CHAR [ ] on line 14...  LEXER --> | T\_CHAR [ n ] on line 14...  LEXER --> | T\_CHAR [ o ] on line 14...  LEXER --> | T\_CHAR [ ] on line 14...  LEXER --> | T\_CHAR [ s ] on line 14...  LEXER --> | T\_CHAR [ p ] on line 14...  LEXER --> | T\_CHAR [ o ] on line 14...  LEXER --> | T\_CHAR [ o ] on line 14...  LEXER --> | T\_CHAR [ n ] on line 14...  LEXER --> | T\_QUOTE [ " ] on line 14...  LEXER --> | T\_CLOSING\_PARENTHESIS [ ) ] on line 14...  LEXER --> | T\_CLOSING\_BRACE [ } ] on line 15...  LEXER --> | T\_CLOSING\_BRACE [ } ] on line 16...  LEXER --> | T\_ID [ b ] on line 18...  LEXER --> | T\_ASSIGNMENT\_OP [ = ] on line 18...  LEXER --> | T\_DIGIT [ 0 ] on line 18...  LEXER --> | T\_ID [ a ] on line 19...  LEXER --> | T\_ASSIGNMENT\_OP [ = ] on line 19...  LEXER --> | T\_DIGIT [ 1 ] on line 19...  LEXER --> | T\_ADDITION\_OP [ + ] on line 19...  LEXER --> | T\_CLOSING\_BRACE [ } ] on line 20...  LEXER --> | T\_CLOSING\_BRACE [ } ] on line 21...  LEXER --> | T\_EOPS [ $ ] on line 21...  Lex Completed With 0 WARNING(S) and 0 ERROR(S)...  Beginning Parsing Session...  PARSER --> | PASSED! Expecting [ T\_OPENING\_BRACE ] found [ T\_OPENING\_BRACE ] on line 1...  PARSER --> | PASSED! Expecting [ Statement ] found [ Statement ] on line 2...  PARSER --> | PASSED! Expecting [ VarDecl ] found [ T\_VARIABLE\_TYPE ] on line 2...  PARSER --> | PASSED! Expecting [ T\_VARIABLE\_TYPE ] found [ T\_VARIABLE\_TYPE ] on line 2...  PARSER --> | PASSED! Expecting [ T\_VARIABLE\_TYPE ] found [ int ] on line 2...  PARSER --> | PASSED! Expecting [ T\_ID ] found [ T\_ID ] on line 2...  PARSER --> | PASSED! Expecting [ T\_ID ] found [ a ] on line 2...  PARSER --> | PASSED! Expecting [ StatementList ] found [ Statement ] on line 3...  PARSER --> | PASSED! Expecting [ Statement ] found [ Statement ] on line 3...  PARSER --> | PASSED! Expecting [ VarDecl ] found [ T\_VARIABLE\_TYPE ] on line 3...  PARSER --> | PASSED! Expecting [ T\_VARIABLE\_TYPE ] found [ T\_VARIABLE\_TYPE ] on line 3...  PARSER --> | PASSED! Expecting [ T\_VARIABLE\_TYPE ] found [ int ] on line 3...  PARSER --> | PASSED! Expecting [ T\_ID ] found [ T\_ID ] on line 3...  PARSER --> | PASSED! Expecting [ T\_ID ] found [ b ] on line 3...  PARSER --> | PASSED! Expecting [ StatementList ] found [ Statement ] on line 5...  PARSER --> | PASSED! Expecting [ Statement ] found [ Statement ] on line 5...  PARSER --> | PASSED! Expecting [ AssignmentStatement ] found [ T\_ID ] on line 5...  PARSER --> | PASSED! Expecting [ T\_ID ] found [ T\_ID ] on line 5...  PARSER --> | PASSED! Expecting [ T\_ID ] found [ a ] on line 5...  PARSER --> | PASSED! Expecting [ T\_ASSIGNMENT\_OP ] found [ = ] on line 5...  PARSER --> | PASSED! Expecting [ Expr ] found [ IntExpr ] on line 5...  PARSER --> | PASSED! Expecting [ IntExpr ] found [ IntExpr ] on line 5...  PARSER --> | PASSED! Expecting [ T\_DIGIT ] found [ 0 ] on line 5...  PARSER --> | PASSED! Expecting [ StatementList ] found [ Statement ] on line 6...  PARSER --> | PASSED! Expecting [ Statement ] found [ Statement ] on line 6...  PARSER --> | PASSED! Expecting [ AssignmentStatement ] found [ T\_ID ] on line 6...  PARSER --> | PASSED! Expecting [ T\_ID ] found [ T\_ID ] on line 6...  PARSER --> | PASSED! Expecting [ T\_ID ] found [ b ] on line 6...  PARSER --> | PASSED! Expecting [ T\_ASSIGNMENT\_OP ] found [ = ] on line 6...  PARSER --> | PASSED! Expecting [ Expr ] found [ IntExpr ] on line 6...  PARSER --> | PASSED! Expecting [ IntExpr ] found [ IntExpr ] on line 6...  PARSER --> | PASSED! Expecting [ T\_DIGIT ] found [ 0 ] on line 6...  PARSER --> | PASSED! Expecting [ StatementList ] found [ Statement ] on line 8...  PARSER --> | PASSED! Expecting [ Statement ] found [ Statement ] on line 8...  PARSER --> | PASSED! Expecting [ WhileStatement ] found [ T\_WHILE ] on line 8...  PARSER --> | PASSED! Expecting [ T\_WHILE ] found [ while ] on line 8...  PARSER --> | PASSED! Expecting [ T\_OPENING\_PARENTHESIS ] found [ ( ] on line 8...  PARSER --> | PASSED! Expecting [ Expr ] found [ Id ] on line 8...  PARSER --> | PASSED! Expecting [ T\_ID ] found [ a ] on line 8...  PARSER --> | PASSED! Expecting [ T\_INEQUALITY\_OP ] found [ != ] on line 8...  PARSER --> | PASSED! Expecting [ Expr ] found [ IntExpr ] on line 8...  PARSER --> | PASSED! Expecting [ IntExpr ] found [ IntExpr ] on line 8...  PARSER --> | PASSED! Expecting [ T\_DIGIT ] found [ 3 ] on line 8...  PARSER --> | PASSED! Expecting [ T\_CLOSING\_PARENTHESIS ] found [ ) ] on line 8...  PARSER --> | PASSED! Expecting [ T\_OPENING\_BRACE ] found [ T\_OPENING\_BRACE ] on line 8...  PARSER --> | PASSED! Expecting [ Statement ] found [ Statement ] on line 9...  PARSER --> | PASSED! Expecting [ PrintStatement ] found [ T\_PRINT ] on line 9...  PARSER --> | PASSED! Expecting [ T\_PRINT ] found [ T\_PRINT ] on line 9...  PARSER --> | PASSED! Expecting [ T\_OPENING\_PARENTHESIS ] found [ T\_OPENING\_PARENTHESIS ] on line 9...  PARSER --> | PASSED! Expecting [ Expr ] found [ Id ] on line 9...  PARSER --> | PASSED! Expecting [ T\_ID ] found [ a ] on line 9...  PARSER --> | PASSED! Expecting [ T\_CLOSING\_PARENTHESIS ] found [ T\_CLOSING\_PARENTHESIS ] on line 9...  PARSER --> | PASSED! Expecting [ StatementList ] found [ Statement ] on line 10...  PARSER --> | PASSED! Expecting [ Statement ] found [ Statement ] on line 10...  PARSER --> | PASSED! Expecting [ WhileStatement ] found [ T\_WHILE ] on line 10...  PARSER --> | PASSED! Expecting [ T\_WHILE ] found [ while ] on line 10...  PARSER --> | PASSED! Expecting [ T\_OPENING\_PARENTHESIS ] found [ ( ] on line 10...  PARSER --> | PASSED! Expecting [ Expr ] found [ Id ] on line 10...  PARSER --> | PASSED! Expecting [ T\_ID ] found [ b ] on line 10...  PARSER --> | PASSED! Expecting [ T\_INEQUALITY\_OP ] found [ != ] on line 10...  PARSER --> | PASSED! Expecting [ Expr ] found [ IntExpr ] on line 10...  PARSER --> | PASSED! Expecting [ IntExpr ] found [ IntExpr ] on line 10...  PARSER --> | PASSED! Expecting [ T\_DIGIT ] found [ 3 ] on line 10...  PARSER --> | PASSED! Expecting [ T\_CLOSING\_PARENTHESIS ] found [ ) ] on line 10...  PARSER --> | PASSED! Expecting [ T\_OPENING\_BRACE ] found [ T\_OPENING\_BRACE ] on line 10...  PARSER --> | PASSED! Expecting [ Statement ] found [ Statement ] on line 11...  PARSER --> | PASSED! Expecting [ PrintStatement ] found [ T\_PRINT ] on line 11...  PARSER --> | PASSED! Expecting [ T\_PRINT ] found [ T\_PRINT ] on line 11...  PARSER --> | PASSED! Expecting [ T\_OPENING\_PARENTHESIS ] found [ T\_OPENING\_PARENTHESIS ] on line 11...  PARSER --> | PASSED! Expecting [ Expr ] found [ Id ] on line 11...  PARSER --> | PASSED! Expecting [ T\_ID ] found [ b ] on line 11...  PARSER --> | PASSED! Expecting [ T\_CLOSING\_PARENTHESIS ] found [ T\_CLOSING\_PARENTHESIS ] on line 11...  PARSER --> | PASSED! Expecting [ StatementList ] found [ Statement ] on line 12...  PARSER --> | PASSED! Expecting [ Statement ] found [ Statement ] on line 12...  PARSER --> | PASSED! Expecting [ AssignmentStatement ] found [ T\_ID ] on line 12...  PARSER --> | PASSED! Expecting [ T\_ID ] found [ T\_ID ] on line 12...  PARSER --> | PASSED! Expecting [ T\_ID ] found [ b ] on line 12...  PARSER --> | PASSED! Expecting [ T\_ASSIGNMENT\_OP ] found [ = ] on line 12...  PARSER --> | PASSED! Expecting [ Expr ] found [ IntExpr ] on line 12...  PARSER --> | PASSED! Expecting [ IntExpr ] found [ T\_DIGIT ] on line 12...  PARSER --> | PASSED! Expecting [ T\_DIGIT ] found [ 1 ] on line 12...  PARSER --> | PASSED! Expecting [ T\_ADDITION\_OP ] found [ + ] on line 12...  PARSER --> | PASSED! Expecting [ Expr ] found [ Id ] on line 12...  PARSER --> | PASSED! Expecting [ T\_ID ] found [ b ] on line 12...  PARSER --> | PASSED! Expecting [ StatementList ] found [ Statement ] on line 13...  PARSER --> | PASSED! Expecting [ Statement ] found [ Statement ] on line 13...  PARSER --> | PASSED! Expecting [ IfStatement ] found [ T\_IF ] on line 13...  PARSER --> | PASSED! Expecting [ T\_IF ] found [ if ] on line 13...  PARSER --> | PASSED! Expecting [ T\_OPENING\_PARENTHESIS ] found [ ( ] on line 13...  PARSER --> | PASSED! Expecting [ Expr ] found [ Id ] on line 13...  PARSER --> | PASSED! Expecting [ T\_ID ] found [ b ] on line 13...  PARSER --> | PASSED! Expecting [ T\_EQUALITY\_OP ] found [ == ] on line 13...  PARSER --> | PASSED! Expecting [ Expr ] found [ IntExpr ] on line 13...  PARSER --> | PASSED! Expecting [ IntExpr ] found [ IntExpr ] on line 13...  PARSER --> | PASSED! Expecting [ T\_DIGIT ] found [ 2 ] on line 13...  PARSER --> | PASSED! Expecting [ T\_CLOSING\_PARENTHESIS ] found [ ) ] on line 13...  PARSER --> | PASSED! Expecting [ T\_OPENING\_BRACE ] found [ T\_OPENING\_BRACE ] on line 13...  PARSER --> | PASSED! Expecting [ Statement ] found [ Statement ] on line 14...  PARSER --> | PASSED! Expecting [ PrintStatement ] found [ T\_PRINT ] on line 14...  PARSER --> | PASSED! Expecting [ T\_PRINT ] found [ T\_PRINT ] on line 14...  PARSER --> | PASSED! Expecting [ T\_OPENING\_PARENTHESIS ] found [ T\_OPENING\_PARENTHESIS ] on line 14...  PARSER --> | PASSED! Expecting [ Expr ] found [ StringExpr ] on line 14...  PARSER --> | PASSED! Expecting [ T\_QUOTE ] found [ T\_QUOTE ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ t ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ h ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ e ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ r ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ e ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ i ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ s ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ n ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ o ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ s ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ p ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ o ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ o ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ T\_CHAR ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CHAR ] found [ n ] on line 14...  PARSER --> | PASSED! λ production on line 14...  PARSER --> | PASSED! Expecting [ T\_QUOTE ] found [ T\_QUOTE ] on line 14...  PARSER --> | PASSED! Expecting [ T\_CLOSING\_PARENTHESIS ] found [ T\_CLOSING\_PARENTHESIS ] on line 14...  PARSER --> | PASSED! λ production on line 15...  PARSER --> | PASSED! Expecting [ T\_CLOSING\_BRACE ] found [ T\_CLOSING\_BRACE ] on line 15...  PARSER --> | PASSED! λ production on line 16...  PARSER --> | PASSED! Expecting [ T\_CLOSING\_BRACE ] found [ T\_CLOSING\_BRACE ] on line 16...  PARSER --> | PASSED! Expecting [ StatementList ] found [ Statement ] on line 18...  PARSER --> | PASSED! Expecting [ Statement ] found [ Statement ] on line 18...  PARSER --> | PASSED! Expecting [ AssignmentStatement ] found [ T\_ID ] on line 18...  PARSER --> | PASSED! Expecting [ T\_ID ] found [ T\_ID ] on line 18...  PARSER --> | PASSED! Expecting [ T\_ID ] found [ b ] on line 18...  PARSER --> | PASSED! Expecting [ T\_ASSIGNMENT\_OP ] found [ = ] on line 18...  PARSER --> | PASSED! Expecting [ Expr ] found [ IntExpr ] on line 18...  PARSER --> | PASSED! Expecting [ IntExpr ] found [ IntExpr ] on line 18...  PARSER --> | PASSED! Expecting [ T\_DIGIT ] found [ 0 ] on line 18...  PARSER --> | PASSED! Expecting [ StatementList ] found [ Statement ] on line 19...  PARSER --> | PASSED! Expecting [ Statement ] found [ Statement ] on line 19...  PARSER --> | PASSED! Expecting [ AssignmentStatement ] found [ T\_ID ] on line 19...  PARSER --> | PASSED! Expecting [ T\_ID ] found [ T\_ID ] on line 19...  PARSER --> | PASSED! Expecting [ T\_ID ] found [ a ] on line 19...  PARSER --> | PASSED! Expecting [ T\_ASSIGNMENT\_OP ] found [ = ] on line 19...  PARSER --> | PASSED! Expecting [ Expr ] found [ IntExpr ] on line 19...  PARSER --> | PASSED! Expecting [ IntExpr ] found [ T\_DIGIT ] on line 19...  PARSER --> | PASSED! Expecting [ T\_DIGIT ] found [ 1 ] on line 19...  PARSER --> | PASSED! Expecting [ T\_ADDITION\_OP ] found [ + ] on line 19...  PARSER --> | ERROR! Expecting [ IntExpr || StringExpr || BooleanExpr || Id ] found [ } ] on line 20...  Parse Completed With 0 WARNING(S) and 1 ERROR(S)... |