Homework 3 Report File

Part1

İmplementation

- for, while and deffun is not implemented .
- Everything else then above is implemented.

Execution

- İf a file name given to read, it reads from that file and print to console and to "output.txt" file.
- İf a file name not given to read, it reads from console line by line and print to console and to "output.txt" file.
- İf an "if" statement given to execute and it is false, returns 0.
- İf an "if" statement given to execute and it is true, it returns EXPLISTI or EXPI depending on the statement.
- An EXPB can be **"true" "false"** due to we do not have BinaryValue token in lexer, yacc will not allow us to EXPB to be **"0" "1"**
- Because yacc yyerror function stops the executing when it finds an error , after program encounter a SYNTAX_ERROR Expression not recognized, it will end the program.
- To start program , you can type to the terminal **./output** ot **./output filename**

Examples

İnput:

;; helloworld.g++

(+ 10 10)

(list 1 2 123)

(++ 1 2 3)

Output:

Syntax OK.

Result: Comment

Syntax OK.

Result: 20

Syntax OK.

Result: (1 2 123)

SYNTAX_ERROR Expression not recognized

İnput:

(+ 3 5)

;;sdfdsfs

(append 4 (list 5 86 52))

(concat (list 5 2 3) (list 69))

(if (equal 15 15) (* 2 8))

(if (and true true) (* 2 5))

(if (and true false) (* 3 5))

(if true (append 5 (list 1 2 3)))

(concat nil nil)

;; helloworld.g++

(+ 10 10)

(list 1 2 123)

(++ 1 2 3)

Output:

Syntax OK.

Result: 8

Syntax OK.

Result: Comment

Syntax OK.

Result: (4 5 86 52)

Syntax OK.

Result: (5 2 3 69)

Syntax OK.

Result: 16

Syntax OK.

Result: 10

Syntax OK.

Result: 0

Syntax OK.

Result: (5 1 2 3)

Syntax OK.

Result: NULL

Syntax OK.

Result: Comment

Syntax OK.

Result: 20

Syntax OK.

Result: (1 2 123)

SYNTAX_ERROR Expression not recognized

Part2

İmplementation

- for, while and deffun is not implemented .
- Everything else then above is implemented.

Execution

- İf a file name given to read, it reads from that file and print to console and to "output.txt" file.
- İf a file name not given to read, it reads from console line by line and print to console and to "output.txt" file.
- İf an "if" statement given to execute and it is false, returns 0.
- İf an "if" statement given to execute and it is true, it returns EXPLISTI or EXPI depending on the statement.
- An EXPB can be **"0" "1" "true" "false"** due to we handle all staff in lisp, we can allow that. In yacc will not allow.
- After program encounter a SYNTAX_ERROR Expression not recognized, it will continue.
- To start program , you can type to the terminal **clisp gpp_interpreter.lisp** or **clisp gpp_interpreter.lisp filename**

Examples

İnput:

;; helloworld.g++

(+ 10 10)

(list 1 2 123)

(++ 1 2 3)

Output:

Syntax OK.

Result: Comment

Syntax OK.

Result: 20

Syntax OK.

Result: (1 2 123)

SYNTAX_ERROR Expression not recognized

İnput:

(+ 3 5)

;;sdfdsfs

(append 4 (list 5 86 52))

(concat (list 5 2 3) (list 69))

(if (equal 15 15) (* 2 8))

(if (and true true) (* 2 5))

(if (and 1 1) (* 2 5))

(if (and true false) (* 3 5))

(if (and 0 1) (* 3 5))

(if true (append 5 (list 1 2 3)))

(concat nil nil)

;; helloworld.g++

(+ 10 10)

(list 1 2 123)

(++ 1 2 3)

Output:

Syntax OK.

Result: 8

Syntax OK.

Result: COMMENT

Syntax OK.

Result: (4 5 86 52)

Syntax OK.

Result: (5 2 3 69)

Syntax OK.

Result: 16

Syntax OK.

Result: 10

Syntax OK.

Result: 10

Syntax OK.

Result: 0

Syntax OK.

Result: 0

Syntax OK.

Syntax OK.

Result: (5 1 2 3)

Result: NIL

Syntax OK.

Result: COMMENT

Syntax OK.

Result: 20

Syntax OK.

Result: (1 2 123)

SYNTAX_ERROR Expression not recognized