

gpp_parser.lisp

gpp_lexer.lisp

bool.gpp

Homework 2.pdf

hw2 > bool.gpp

1 ;;helloworld.g++

2 (or false true false)

3 (or false false false)

4 (and true true true)

5 (and false false false)

6 (not false)

7 (not true)

8 (equal false true)

9 (equal 13 13)

10 (equal 1 33)

11 (less 1 5)

12 (less 3 1)

13

mbulucay@ubuntu: ~/Desktop/pl/hw2

mbulucay@ubuntu:~/Desktop/pl/hw2\$ clisp gpp_parser.lisp bool.gpp

Syntax OK:

Result: true

Syntax OK:

Result: false

Syntax OK:

Result: true

Syntax OK:

Result: false

Syntax OK:

Result: true

Syntax OK:

Result: false

Syntax OK:

Result: true

Syntax OK:

Result: false

Syntax OK:

Result: true

Syntax OK:

Result: false

mbulucay@ubuntu:~/Desktop/pl/hw2\$

gpp_parser.lisp

gpp_lexer.lisp

den.gpp

hw2 > den.gpp

```
1  ;;helloworld.g++
2  (or false true false)
3  (or false false false)
4  (and true true true)
5  (and false false false)
6  (not false)
7  (not true)
8  (equal false true)
9  (equal 13 13)
10 (equal 1 33)
11 (less 1 5)
12 (less 3 1)
13 ;;helloworld.g++
14 (+ (+ 3 3) 4)
15 (* (+ 11 9) (- 10 8))
16 (/ (+ 4 9) (- 10 8))
17 (** (+ 1 1) (+ (- 10 8) 2))
18 ;;helloworld.g++
19 (list 1 3 4 (+ 3 3))
20 (concat (list 11 22) (list 33 44))
21 (concat (list 12 22) (list 32 42))
22 (append 3 (list 4 5))
23 (append 7 (list 4 5 6))
24 ;;helloworld.g++
25 (set x 12)
26 (set y (list 12 22 32))
27 (set z (append 42 (list 12 22 32)))
28 (set m (concat (list 1 2 3) (append (+ 21 32) (list (+ (+ 2 2) 3) 22 32))))
29 ;;helloworld.g++
30 (disp x)
31 (disp y)
32 (disp z)
33 (disp m)
34 (exit)
```



mbulucay@ubuntu: ~/Desktop/pl/hw2



mbulucay@ubuntu:~/Desktop/pl/hw2\$ clisp gpp_parser.lisp den.gpp

```
Result: true
Result: false
Result: true
Result: false
Result: true
Result: false
Result: false
Result: true
Result: false
Result: true
Result: false
Result: 10
Result: 40
Result: 13/2
Result: 16
Result: (1 3 4 6)
Result: (11 22 33 44)
Result: (12 22 32 42)
Result: (4 5 3)
Result: (4 5 6 7)
Result: 12
Result: (12 22 32)
Result: (12 22 32 42)
Result: (1 2 3 7 22 32 53)
Result: 12
Result: x
Result: (12 22 32)
Result: y
Result: (12 22 32 42)
Result: z
Result: (1 2 3 7 22 32 53)
Result: m
```

mbulucay@ubuntu:~/Desktop/pl/hw2\$

```
gpp_parser.lisp  gpp_lexer.lisp  func.gpp  bool.gpp  var.gpp
hw2 > func.gpp
1  ;;helloworld.g++
2  (list 1 3 4 (+ 3 3))
3  (concat (list 11 22) (list 33 44))
4  (concat (list 12 22) (list 32 42))
5  (append 3 (list 4 5))
6  (append 7 (list 4 5 6))
7  (concat (list 1 2 3) (concat (list 4 5 6) (append 9 (list 7 8))))
8
```

```
mbulucay@ubuntu: ~/Desktop/pl/hw2
mbulucay@ubuntu:~/Desktop/pl/hw2$ clisp gpp_parser.lisp func.gpp
Syntax OK:
Result: (1 3 4 6)
Syntax OK:
Result: (11 22 33 44)
Syntax OK:
Result: (12 22 32 42)
Syntax OK:
Result: (4 5 3)
Syntax OK:
Result: (4 5 6 7)
Syntax OK:
Result: (1 2 3 4 5 6 7 8 9)
mbulucay@ubuntu:~/Desktop/pl/hw2$
```

gpp_parser.lisp x gpp_lexer.lisp operator.gpp x func.gpp bool.gpp

hw2 > operator.gpp

```
1 ;;helloworld.g++
2 (- 16 4)
3 (+ (+ 3 3) 4)
4 (* (+ 11 9) (- 10 8))
5 (/ (+ 4 9) (- 10 8))
6 (** (+ 1 1) (+ (- 10 8) 2))
7
```

mbulucay@ubuntu: ~/Desktop/pl/hw2

```
mbulucay@ubuntu:~/Desktop/pl/hw2$ clisp gpp_parser.lisp operator.gpp
Syntax OK:
Result: 12
Syntax OK:
Result: 10
Syntax OK:
Result: 40
Syntax OK:
Result: 13/2
Syntax OK:
Result: 16
mbulucay@ubuntu:~/Desktop/pl/hw2$
```

mbulucay@ubuntu: ~/Desktop/pl/hw2/teslim/part2

```
mbulucay@ubuntu:~/Desktop/pl/hw2/teslim/part2$ clisp gpp_parser.lisp
$> (12as 12 123)
SYNTAX ERROR: '12as' Expression not recognized :
mbulucay@ubuntu:~/Desktop/pl/hw2/teslim/part2$ clisp gpp_parser.lisp
$> (++ 123 13)
SYNTAX ERROR: '++' Expression not recognized :
mbulucay@ubuntu:~/Desktop/pl/hw2/teslim/part2$ clisp gpp_parser.lisp
$> (**++123 false)
SYNTAX ERROR: '**++123' Expression not recognized :
mbulucay@ubuntu:~/Desktop/pl/hw2/teslim/part2$
```

```
mbulucay@ubuntu: ~/Desktop/pl/hw2
mbulucay@ubuntu:~/Desktop/pl/hw2$ clisp gpp_parser.lisp
$> (and false true true)
Syntax OK:
Result: false
$> (and true true)
Syntax OK:
Result: true
$> (or true false true)
Syntax OK:
Result: true
$> (or false false)
Syntax OK:
Result: false
$> (not false)
Syntax OK:
Result: true
$> (not true)
Syntax OK:
Result: false
$> (equal true false)
Syntax OK:
Result: false
$> (equal false false)
Syntax OK:
Result: true
$> (equal 3 3)
Syntax OK:
Result: true
$> (less 3 1)
Syntax OK:
Result: false
$> (less 1 3)
Syntax OK:
Result: true
$> (exit)

mbulucay@ubuntu:~/Desktop/pl/hw2$
```


mbulucay@ubuntu: ~/Desktop/pl/hw2

mbulucay@ubuntu:~/Desktop/pl/hw2\$ clisp gpp_parser.lisp

\$> (list 1 2 3)

Syntax OK:

Result: (1 2 3)

\$> (append 2 (list 1 2 3))

Syntax OK:

Result: (1 2 3 2)

\$> (append 4 (append 3 (append 2 (list 1))))

Syntax OK:

Result: (1 2 3 4)

\$> (concat (list 2 4 5) (list 7 9 11))

Syntax OK:

Result: (2 4 5 7 9 11)

\$> (concat (list 12 13 32) (append 33 (list 1 43 32 2)))

Syntax OK:

Result: (12 13 32 1 43 32 2 33)

\$> (exit)

mbulucay@ubuntu:~/Desktop/pl/hw2\$



mbulucay@ubuntu: ~/Desktop/pl/hw2



```
mbulucay@ubuntu:~/Desktop/pl/hw2$ clisp gpp_parser.lisp
```

```
$> (+ 2 3)
```

```
Syntax OK:
```

```
Result: 5
```

```
$> (** 2 4)
```

```
Syntax OK:
```

```
Result: 16
```

```
$> (+ 12 ( + 12 12))
```

```
Syntax OK:
```

```
Result: 36
```

```
$> (exit)
```

```
mbulucay@ubuntu:~/Desktop/pl/hw2$
```




mbulucay@ubuntu: ~/Desktop/pl/hw2



```
mbulucay@ubuntu:~/Desktop/pl/hw2$ clisp gpp_parser.lisp
```

```
$> (set x (list 1 2 3))
```

```
Syntax OK:
```

```
Result: (1 2 3)
```

```
$> (set y 31)
```

```
Syntax OK:
```

```
Result: 31
```

```
$> (disp y)
```

```
Result: 31
```

```
Syntax OK:
```

```
Result: y
```

```
$> (disp x)
```

```
Result: (1 2 3)
```

```
Syntax OK:
```

```
Result: x
```

```
$> (exit)
```

```
mbulucay@ubuntu:~/Desktop/pl/hw2$
```

gpp_parser.lisp xgpp_lexer.lispoperator.gppfunc.gppbool.gpp

hw2 > var.gpp
1 ;;helloworld.g++
2 (set x 12)
3 (set y (list 12 22 32))
4 (set z (append 42 (list 12 22 32)))
5 (set m (concat (list 1 2 3)(append (+ 21 32) (list (+ (+ 2 2) 3) 22
6 ;;helloworld.g++
7 (disp x)
8 (disp y)
9 (disp z)
10 (disp m)
11

mbulucay@ubuntu: ~/Desktop/pl/hw2

mbulucay@ubuntu:~/Desktop/pl/hw2\$ clisp gpp_parser.lisp var.gpp
Syntax OK:
Result: 12
Syntax OK:
Result: (12 22 32)
Syntax OK:
Result: (12 22 32 42)
Syntax OK:
Result: (1 2 3 7 22 32 53)
Result: 12
Syntax OK:
Result: x
Result: (12 22 32)
Syntax OK:
Result: y
Result: (12 22 32 42)
Syntax OK:
Result: z
Result: (1 2 3 7 22 32 53)
Syntax OK:
Result: m
mbulucay@ubuntu:~/Desktop/pl/hw2\$