

Proyecto 1 – LISP

Integrantes:

- André Salazar
- José Block
- Estuardo Díaz

1 FASE 1

1.1 IDE

Para trabajar ejemplos en LISP se utilizó un IDE online **repl.it** (<https://repl.it/repls>).

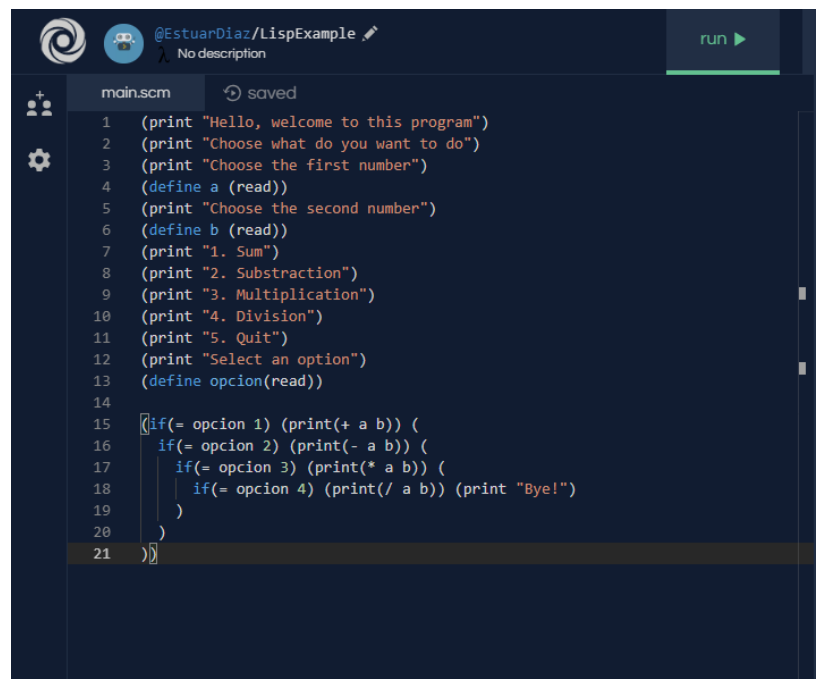


```
1 ;gnu clisp 2.49
2
3 (print "Hello, Welcome to this program")
4 (print "Choose what do you want to do")
5 (print "Choose the first number")
6 (print "Choose the second number")
7 (set a (read))
8 (set b (read))
9 (opcion = 0)
10 (print "1. Sum")
11 (print "2. Subtraction")
12 (print "3. Multiplication")
13 (print "4. Division")
14 (print "5. Quit")
15
16 (if(opcion == 1)(print(+ a b )))
17 (if(opcion == 2)(print(- a b )))
18 (if(opcion == 3)(print(* a b )))
19 (if(opcion == 4)(print(/ a b )))
20 (if(opcion == 5)(print "Bye, and come to vis:"))
21
```

1.2 EJEMPLO REALIZADO

Se realizó una calculadora sencilla para probar los comandos de lectura, escritura, declaración de variables y condicionales.

Referencia: *Shapiro, Stuart Charles*
Common LISP: an interactive approach / by Stuart C. Shapiro.

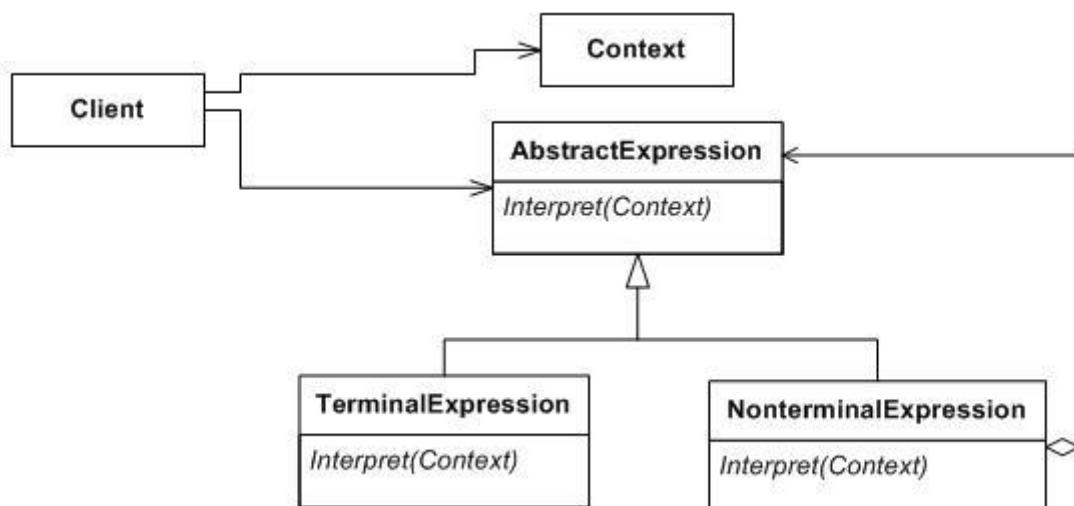


```
main.scm saved
1 (print "Hello, welcome to this program")
2 (print "Choose what do you want to do")
3 (print "Choose the first number")
4 (define a (read))
5 (print "Choose the second number")
6 (define b (read))
7 (print "1. Sum")
8 (print "2. Subtraction")
9 (print "3. Multiplication")
10 (print "4. Division")
11 (print "5. Quit")
12 (print "Select an option")
13 (define opcion(read))
14
15 (if(= opcion 1) (print(+ a b)) (
16   if(= opcion 2) (print(- a b)) (
17     if(= opcion 3) (print(* a b)) (
18       if(= opcion 4) (print(/ a b)) (print "Bye!")
19     )
20   )
21 ))
```

Output:

```
BiwaScheme Interpreter version 0.6.4
Copyright (C) 2007-2014 Yutaka HARA and the BiwaScheme team
>
Hello, welcome to this program
Choose what do you want to do
Choose the first number
12
Choose the second number
4
1. Sum
2. Substraction
3. Multiplication
4. Division
5. Quit
Select an option
3
48
> |
```

1.3 UML DEL INTÉRPRETE



Obtenido de: SourceMaking - Interpreter Design Pattern. Link:

https://sourcemaking.com/design_patterns/interpreter

1.4 REPOSITORIO DE GIT

<https://github.com/EstuarDiaz/ProyectoLISP.git>