

Bistro Matic



The goal of the project:

The goal of this project is to write a program that will display the result of an evaluated mathematical expression. The expression will be composed of infinite integers that can be expressed in any base. The program must handle the following operators: +-*/%, parentheses, operation priorities and syntax errors, but not float numbers.

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How does it work?

```
Terminal
~/B-CPE-101> ./calc -h
USAGE
./calc base operators size_read

DESCRIPTION
- base: all the symbols of the base
- operators: the symbols for the parentheses and the 5 operators
- size_read: number of characters to be read
```

Some examples:

```
Terminal
~/B-CPE-101> echo '3+6' | ./calc 0123456789 '()+-*/%' 3 ; echo
9
~/B-CPE-101> echo '3v6' | ./calc 0123456789 '{}vwxyz' 3 ; echo
9
~/B-CPE-101> echo '-----+-6(12)' | ./calc 0123456789 '()+-*/%' 10 ; echo
syntax error
~/B-CPE-101> echo '-----+-6*12' | ./calc 0123456789 '()+-*/%' 11 | cat -e ; echo
-72
~/B-CPE-101> echo '-(12-(4*32))' | ./calc 0123456789 '()+-*/%' 12 | cat -e ; echo
116
~/B-CPE-101> echo '-(e@-(!*!@))' | ./calc '0A@!;ie& ]' '()+-*/%' 12 | cat -e ;
echo
ee
~/B-CPE-101> echo '-(12*(13+15/5*(6/(12+14%(30%5+(10*25)-46)+16)-20)/43)*20)
*(-(12-98*42)*(16+63-50/3))' | ./calc 0123456789 '()+-*/%' 84 | cat -e ; echo
-744629760
```