# C - Pool - Tek1

## Evalexpr

C Pool Managers
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# Subject

- The purpose is to write the `eval_expr` function.
- It must be prototyped like this:

```
1   int eval_expr(char *str);
```

- Respect the norm takes time, but is good for you. This way your code will respect the norm since the first written line.
- Turn-in directory:
  `Piscine_C_eval_expr`

*Indices* `Remember it is always better to create your repository at the beginning of the day and to turn-in your work on a regular basis`

- This function take a character string as parameter that represents an arithmetical expression.
  Example:

```
"3 + 42 * (1 - 2 / (3 + 4) - 1 % 21) + 1"
```

- This expression will have to be calculated, and the result returned as return value by the function.
- The string that you will receive will be valid (no bugs, no bad address, no letter nor syntax error, no division by zero...).
- The 5 operators must be supported :
  - `+` for addition
  - `-` for subtraction
  - `/` for division
  - `*` for multiplication
  - `%` for modulo
- The function also has to handle any number of parenthesises.
- You must realize a Makefile that permits to generate an executable `eval_expr` with a rule `all`. A rule `clean` and a rule `fclean` must also be present.
- You can use you lib from your Makefile, it has to be stored like for any pool day:
  `Piscine_C_eval_expr/lib/my`
  the my.h file being in:
  `Piscine_C_eval_expr/include`

- Your `main` must be the following one:

```
1 int main(int ac, char **av)
2 {
3   if (ac > 1)
4   {
5     my_put_nbr(eval_expr(av[1]));
6     my_putchar('\n');
7   }
8   return (0);
9 }
```

- We will test in this way:

```
$> make clean
$> make all
$> ./eval_expr '(3+2)*5'
...
$> make fclean
```