Week-end Challenge

04

Subject:

Creating a random dice roller.

Rules:

- Only 1 submission per student/team. You can work in teams of up to 2. The points will be divided for each member of the team.
- Your code has to be written in C and compile with the following flags: -Wall -Wextra -Werror
- Try to respect the norm as much as you can to make it readable, but also feel free to take some liberties if you want to: longer functions (more than 25 lines), the use of switch and for, etc
- To compile your program, please provide a Makefile or, if you can't be bothered, a script called build.sh.
- Handling error cases (invalid arguments, etc) is not mandatory, but doing it will be considered a bonus.

Mandatory part:

program name	roll
turn-in files	*.c / *.h / Makefile or build.sh
Arguments	 the number of dices to throw {1, 128} the number of sides of the dices {2, 50}
Authorized libraries	anything from the libc
Description	Your program will receive a number of dices to roll and the number of sides the dices have and print the corresponding results using pseudorandom generation functions.

Upon being called, the roll program will print $Rolling \ x \ dy...$ on the first line - with X being the number of dice and Y the number of sides - and will print one dice roll result on each following lines.

Use case:

```
> ./roll 5d20
Rolling 5 d20...
17
2
7
8
4
>
```

Ressources:

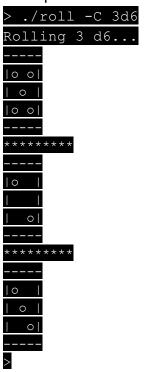
- WEC GitHub repository
- Online dice roller example

Bonus:

If your program works perfectly, you can add more features to increase your chances of winning. Feel free to add any bonus you want, here are a few suggestions:

- Implementing your own pseudorandom number generator without using the premade functions (rand(), time(), etc).
- Making a **cool** command line interface

Example:



- Adding explosive dice rolls - AKA re-rolling a dice if it reaches the maximum value.

Example:

```
> ./roll -E 5d19
Rolling 2 d6...
12
19 -> 8
3
11
19 -> 19 -> 16
>
```

Turn-in:

To submit your project, compress the folder of the source code into a zip archive and send it by email to $\frac{\texttt{tutors@s19.be}}{\texttt{tutors@s19.be}}$ with the following subject: $\frac{\texttt{wec04} - [login]}{\texttt{login}}$. The deadline is Sunday at 10:19pm.

Results:

The results will be announced after the following Monday's AMA.