

## C1 - Piscine C

C-CPE-042

# Fir Tree

An ascii art resizable Fir tree

1.1





# Fir Tree

repository name: pool\_c\_sapin repository rights: ramassage-tek

language: C

- Technicals details
- Subject
  - Examples
    - Small tree
    - relatively large tree



### **TECHNICALS DETAILS**



Don't push your main function into your delivery directory, we will be adding our own. Your files will be compiled adding our main.c and our my\_putchar.c files.



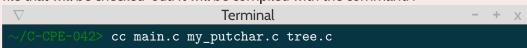
You are only allowed to use the **my\_putchar** function to complete the following tasks, but don't push it into your delivery directory, and don't copy it in any of your delivered files



The only allowed system call for this project is write.



You must deliver a file called "tree.c" in the root of your repository: this is the only source file that will be checked-out. It will be compiled with the command:





### **SUBJECT**

Write a function that displays a fir tree, based on its given size.

If the size is 0, don't display anything.

The function must be prototyped as follows:





You can find a binary called, **tree** on the intranet along with the project description.

Don't forget that you need a coherent test policy to ensure your program outputs are correct. To do so:

- split your functions in **as many small functions as possible**, so that each function is responsible for one single thing (according to the Coding Style).
- Test each of your functions **individually** AND try to automate your testing process with some (shell?) scripts.



These are the first steps in what we call computing tests, and more precisely: unit tests.

+ EXAMPLES

#### SMALL TREE

```
Terminal - + x

~/C-CPE-042> ./a.out 1

*
***

***

*****

|
```





#### **RELATIVELY LARGE TREE**

```
Terminal
      ./a.out 5
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