



C Piscine

Rush 01

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Abstract: This document is the subject for Rush01 of the C Piscine @ 42.

Contents

| | | |
|------------|---------------------|----------|
| I | Instructions | 2 |
| II | Foreword | 4 |
| III | subject | 6 |

Chapter I

Instructions

- Each member of the group can register the whole group to defense.
- The group MUST be registered to defense.
- Any question concerning the subject would complicate the subject.
- You have to follow the submission procedures for all your exercises.
- This subject could change up to an hour before submission.
- Moulinette compiles with the following flags: -Wall -Wextra -Werror; and uses gcc.
- If your program doesn't compile, you'll get 0.
- You must do the project with the imposed team and show up at the defense slot you've selected, with all of your teammates.
- Your project must be done by the time you get to defense. The purpose of defense is for you to present and explain any and all details of your work.
- Each member of your group must be fully aware of the works of the project. Should you choose to split the workload, make sure you all understand what everybody's done. During defense, you'll be asked questions, and the final grade will be based on the worst explanations.
- Gathering the group is your responsibility. You've got all the means to get in contact with your teammates: phone, email, carrier pigeon, spiritism, etc. So don't bother blurping up excuses. Life isn't always fair, that's just the way it is.
- However, if you've really tried everything one of your teammates remains unreachable : do the project anyway, and we'll try and see what we can do about it during defense. Even if the group leader is missing, you still have access to the submission directory.
- It goes without saying, but your work must respect the Norm. Be thorough.

- Enjoy !

Chapter II

Foreword

Here are some cool quotes from some random movies :

1. "Find a truly original idea. It is the only way I will ever distinguish myself. It is the only way I will ever matter."

-A Beautiful Mind

2. "You don't have to be the bad guy. You are the most talented, most interesting, and most extraordinary person in the universe. And you are capable of amazing things. Because you are the Special. And so am I. And so is everyone. The prophecy is made up, but it's also true. It's about all of us. Right now, it's about you. And you... still... can change everything."

-The Lego Movie

3. "Sometimes it is the people who no one imagines anything of who do the things that no one can imagine." -The Imitation Game

4. "There should be no boundaries to human endeavor. We are all different. However bad life may seem, there is always something you can do, and succeed at. While there's life, there is hope."

-The Theory of Everything

5. "Just because someone stumbles and loses their path, doesn't mean they're lost forever."

-X-Men Days of Future Past

6. "Where we're going we don't need roads"

-Back to the future

7. "I'm bad, and that's good. I will never be good, and that's not bad. There's no one I'd rather be than me."

-Wreck-it Ralph


8. "KA-ME-HA-ME-HAAAAAAAAAAAA"

-Various movies

Movie culture won't help for this project even if it's important.

Chapter III

subject

| | |
|---|---------------|
|  | Exercice : 00 |
| Rush-1 | |
| Turn-in directory : <i>ex00/</i> | |
| Files to turn in : All necessary files | |
| Allowed functions : write, malloc, free | |
| Remarks : n/a | |

- Your source code will be compiled as follows: `gcc -Wall -Wextra -Werror -o rush-1 *.c`
- Your submission directory must have all files required to compile your program.
- Create a program that resolves a sudoku.
- A valid sudoku has only one possible solution.
- Here's how we'll launch your program :

```
> ./rush-1 line0 line1 line2 line3 line4 line5 line6 line7 line8
```

- LineN represents a characters string of values ranged between '1' and '9' or '.' (for empty boxes).
- Here's an example of intended input/output for a valid sudoku.

```
>./sudoku "9...7...." "2...9..53" ".6..124.." "84...1.9." "5.....8.." ".31..4..." "..37..68."
".9..5.741" "47....." | cat -e
9 1 4 3 7 5 2 6 8$
2 8 7 4 9 6 1 5 3$
3 6 5 8 1 2 4 7 9$
8 4 6 5 2 1 3 9 7$
5 2 9 6 3 7 8 1 4$
7 3 1 9 8 4 5 2 6$
1 5 3 7 4 9 6 8 2$
6 9 8 2 5 3 7 4 1$
```

```
4 7 2 1 6 8 9 3 5$  
>
```

- In case of error, display "Error" followed by a line break.