## **Exam Instruction**

Two zip folder containing the exercises will be uploaded on moodle. You need to take only the part for which you registered.

Important: if you are here to try to get a better grade, you can keep your old grade if you retire. IF YOU SUBMIT THE SOLUTIONS, YOU LOSE YOUR PREVIOUS GRADE AND GET THE NEW ONE DEPENDING OF THIS EXAM.

There are 3 exercises, for a total of 33 points, in the Crypto and Web parts of the course:

- 1) Scramble Pirate (Crypto) 11 points
- 2) The eXORcist (Crytpo) 11 points
- 3) Action House (Web) 11 points

There are 3 exercises, for a total of 33 points, in the Reverse Engineering and Pwning areas of the course:

- 1) Guess Thissss (Rev) 11 points
- 2) Another Patch Me (Rev) 11 points
- 3) Goat (Pwn) 11 points

If you have problems with files, please contact us immediately.

To pass this first challenge, you need at least **16 points**. If you realize you cannot reach 16 points with what you did (e.g., you did not solve any exercise fully), please consider retiring from the exam. This will speed up the grading time for your colleagues. Anyway, you can still get points for unsolved problems, so provide us with everything you did.

For each exercise, we supply two additional hints (available on Moodle), that can help you if you need.

**Opening a hint will automatically remove 3 points**. We don't give a negative grade for an exercise, e.g. if you open a hint but you don't solve that exercise.

You can open the same hint all the times you want.

To solve an exercise, you need to find a **flag** in the **spritz{...}** format, and send it to us along with a description of what you did to find it (**write-up**), and the eventual code you wrote. To submit your answer, **upload a zip containing all the files on the corresponding assignment on Moodle.** 

You are allowed to browse the internet and any other material if you have doubts about python functions, libraries, etc. Only talking with colleagues is strictly prohibited.

You have time until 12.00 to finish the exam

## Please note that in this challenge the flag is important, but the write-up and description of the steps are "importanter"

## **NOTES**

**Note I**: The exercises' order doesn't matter; you can start with whatever you think is the best.

**Note II**: If you are stuck, use a hint or move to the next exercise. If you think there is an error in the exercise, please contact us!

**Note III**: Remember to use Python 3 or above when running the exercises.

**Note IV**: Please submit everything you did, even if you did not fully solve the exercises. You can still gain some precious points.