

SIMULATION & PHYSICS – PRACTICAL 4

Write a report (pdf or word) in which you **explain** your solution to the assignments below.

For each assignment:

1. repeat the assignment you are implementing;
2. explain your approach;
3. describe your code;
4. show (relevant) code snippets;
5. include a screenshot of your program.

Once your report is finished, make sure your name and student number is on the title page, and upload it to the corresponding Assignment in your **VLO group** before June 4th, 23:00.

Assignments are graded with a V (sufficient) or O (insufficient).

You can work in pairs, but you each have to write your own explanations!

(Code snippets and screenshots may be identical.)

Download the source solution for “Collision” from the VLO. Make sure that the program runs, and you understand the code before you start implementing the assignments below.

Assignment 1: Implement collision

Implement the collision method `ResolveCollisionWith` in the `Ball` class so that all the balls have vector base collision as explained in the slides from practical 4:

- Different balls collide based on vectors
- Interpenetration is resolved
- Velocities are adjusted based on equal mass