SIMULATION & PHYSICS – PRACTICAL 5

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 11th, 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.)

Continue the source solution from your finished assignment 4 “Collision”. It's advisable to make a copy of your previous project before you start implementing the assignments below.

Assignment 1: Collision with inelastic bounce & mass

Adjust the collision method ResolveCollisionWith in the Ball class so that the collision of all the balls is affected by an inelastic bounce and by mass as explained in the slides from practical 5:

- Randomize the radii of the balls in the PlayingState from 8 to 23.
- Create a variable for inverseMass. *inverseMass = 1/(radius * radius);*
- Implement collision influenced by the mass of the Balls according to the final collision algorithm from the slides of practical 5.
- *Note: bounceFactor is named inelastic in the solution of assignment 4