NPRG065: Progamming in Python

Practicals 11

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D3S

1. Extend the `Rectangle` class (from the 7th practicals) to support the equality test and comparison based on the area of the rectangle

2. Extend the `Matrix` class (from the 7th practicals) to support the following operators:
   - add, multiply, equal,...
   - Implement operators for operations between ints and matrices

3. Create a class representing a balanced binary tree (red-black, AVL, …)
   - You can omit the "balanced" part and implement it later
   - Add operators or special methods at least for
     - Adding to the tree +
     - Converting to string
     - "Nicely" indented print
     - Iteration from the smallest element in the tree to the largest one

   - Use the tree in a program that loads numbers from a file (numbers are separated by a white space) and prints them out in the sorted order