Assignment4

Divide & Conquer
Closest Points

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Deadline

Thursday, 20 June 2019 at 23:55.

Task

- Generate a set of random points (as a matrix / list-of-list) given the size of the set and the ranges (vertical and horizontal) in which the points are generated. (5%)
- Implement the **Divide & Conquer** algorithm for finding the two closest points in the generated set and print to standard output the result in a meaningful way. (60%)
- Since you have to use some sorting algorithms, implement it yourself choosing one you did not use in the past assignments. (15%)
- Implement a `main` function/script that calls the algorithm with the different inputs and checks if the result is correct (using the naïve algorithm, which checks the distances pair-by-pair). (10%)
- Write readable and well-commented code describing what every function does. (10%)

Tips & Suggestions

- Follow the naming conventions posted on the course webpage; in addition, I prefer receiving zip files over GitHub links, thank you!
- Write elegant code!

- Try NOT to use IDEs, but text editor + command line for programming!
- Send me ONLY the source code (NO compiled files)
- LESS (additional libraries you use) IS MORE (delight for me while checking your submissions)!!!
- I expect also a file explaining how to compiling and running your code from the terminal!