Assignment3

Prim & Bellman-Form

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Deadline

Thursday, 25 June 2020 at 23:55.

Task

- Extend the (sketch of the) template classes posted on Moodle for implementing a Graph. (10%)
- Represent a directed weighted graph and implement the Prim algorithm for computing the Minimum Spanning Tree of a graph. (30%)
- Represent a directed weighted graph and implement the Bellman-Ford algorithm for computing the Single-Source Shortest Path of a graph. (30%)
- Implement a `printGraph` function that prints a Graph using the *dot format* notation, highlighting also the edges that are part of a Minimum Spanning Tree or a Shortest Path. (10%)
- Implement a `main` function that calls the two algorithms with different inputs. (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!

- Test your algorithm with borderline case inputs too!
- 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)!!!