

# Assignment3

## Dijkstra

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### Deadline

Thursday, 7 June 2019 at 23:55.

### Task

- Extend the (sketch of the) template classes posted on the course webpage in order to represent a directed weighted and implement a sorting algorithm (it is necessary for the Dijkstra algorithm). (15%)
- Represent a directed weighted graph and implement the Dijkstra algorithm for computing the Single-Source Shortest Path of the graph represented in the Fig. 1. (60%)
- Implement a `main` function/script that calls the two algorithms with different inputs. (15%)
- 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)!!!
- I expect also a file explaining how to compiling and running your code from the terminal!

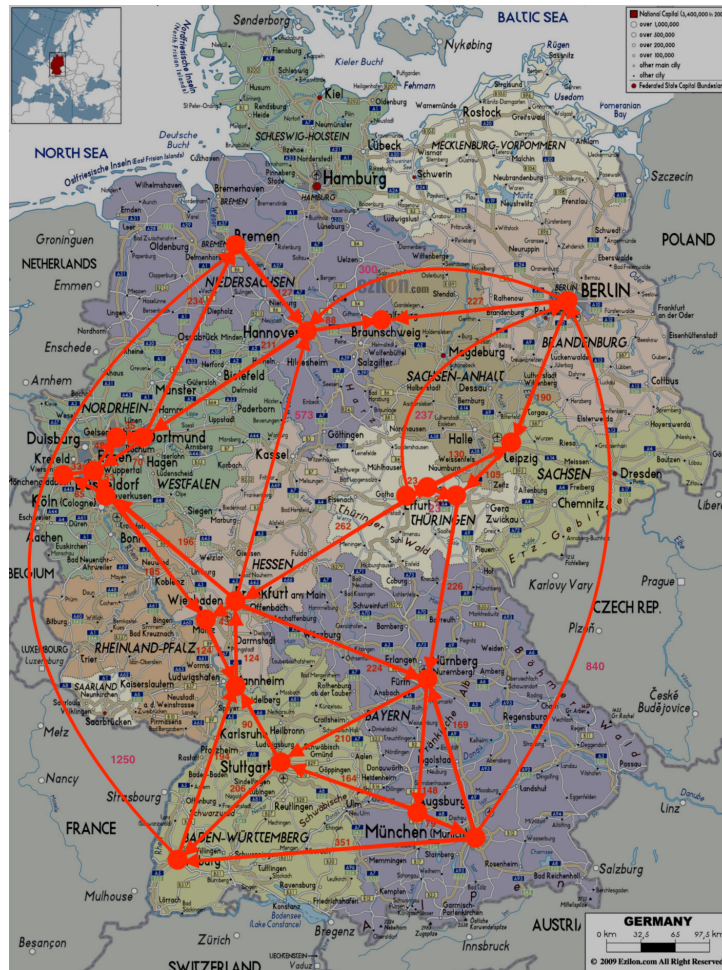


Figure 1: Directed graph for Dijkstra task