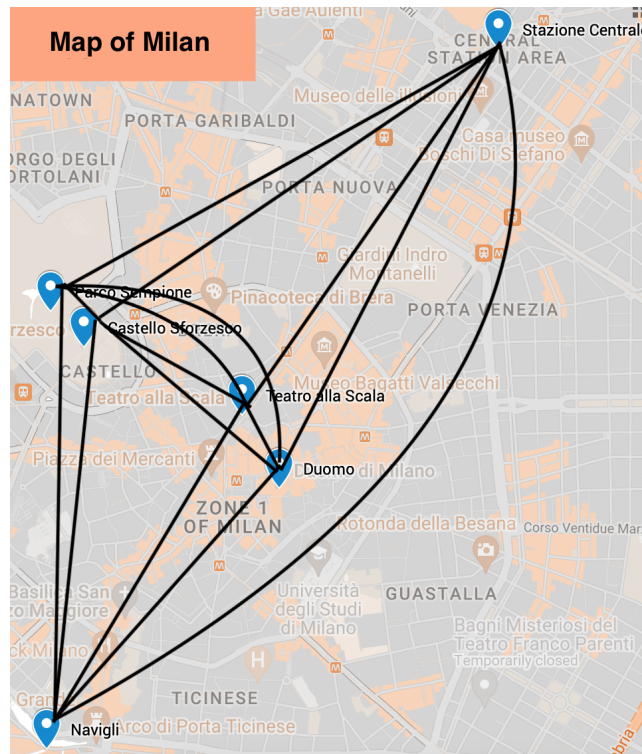# A trip to Milan

Difficulty level: beginner

Keywords

- Graph theory

- Undirected graphs

- Heuristic algorithms

Problem description

In a few weeks, you will go on a day trip to Milan, where you are going to visit a tour of monuments and squares. In particular, once you arrive at Stazione Centrale, you will visit the Duomo, the Teatro alla Scala, the Castello Sforzesco, the Sempione Park, and the Navigli.

The table below shows the walking distances (in km) between all the points of attraction you have chosen. For instance, the Duomo is 0.45 km far from Teatro alla Scala.

	Stazione Centrale	Duomo	Teatro alla Scala	Castello Sforzesco	Sempione Park	Navigli
Stazione Centrale	–	2.9	2.5	2.8	3.2	5.7
Duomo	2.9	–	0.45	1.9	1.6	2.9
Teatro alla Scala	2.5	0.45	–	1	1.5	3.1
Castello Sforzesco	2.8	1.9	1	–	0.28	3
Sempione Park	3.2	1.6	1.5	0.28	–	3.4
Navigli	5.7	2.9	3.1	3	3.4	–

Tasks

1. Determine a tour starting from and returning to Stazione Centrale, and that allows you to visit all the attractions once and only once by walking as little as possible.