Practical activity #5

Chapter 3

Student EQF level: 5-6

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Sources for the practical exercise

- 3.2.2 Technologies most fit for LMD logistics
- 3.2.3 Information collection in LMD
- 3.4.4 Investing in new technologies

Objective

The objective of this activity is to make students familiar with different types of navigation systems and maps in urban areas. Simultaneously, students should be able to take advantage of entering different values, different means of transport if possible and evaluating its outcomes in the context of goods distribution, circular route and looking for the optimal order or servicing stores/enterprises.

For our purposes, maps by google.com, mapy.cz and waze.com were chosen. Voluntarily, other GNSS and portals can be used for these exercises. Working with unknown area will improve student´s skills in orientation and looking for traffic data.

Instructions

As a warm-up, introduction or getting familiar with the presented map portals, have a look at Practical Activity 5 EQF4.

Exercise 1

In the context of distribution of goods, find routes from the distribution centre in Prague to the stores in Beroun, Kladno, Mělník

Choose one or more map portals to find out distances between **all** given points/stores.

Exercise 2

Find a circular route from the distribution centre in Prague to the stores in Beroun, Kladno and Mělník. How long is it?

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Solution procedure

Finding a circular route involves the following steps:

- Start the circular route at the distribution centre,

- include the shortest route to the nearest store in the circular route,

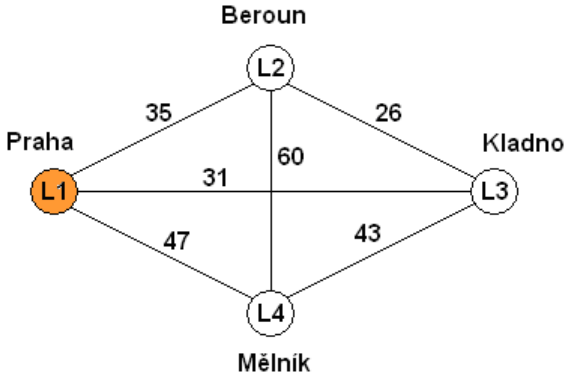
- from the visited store, select the shortest route to the nearest unvisited store,

- and continue with the previous step until all stores have been visited,

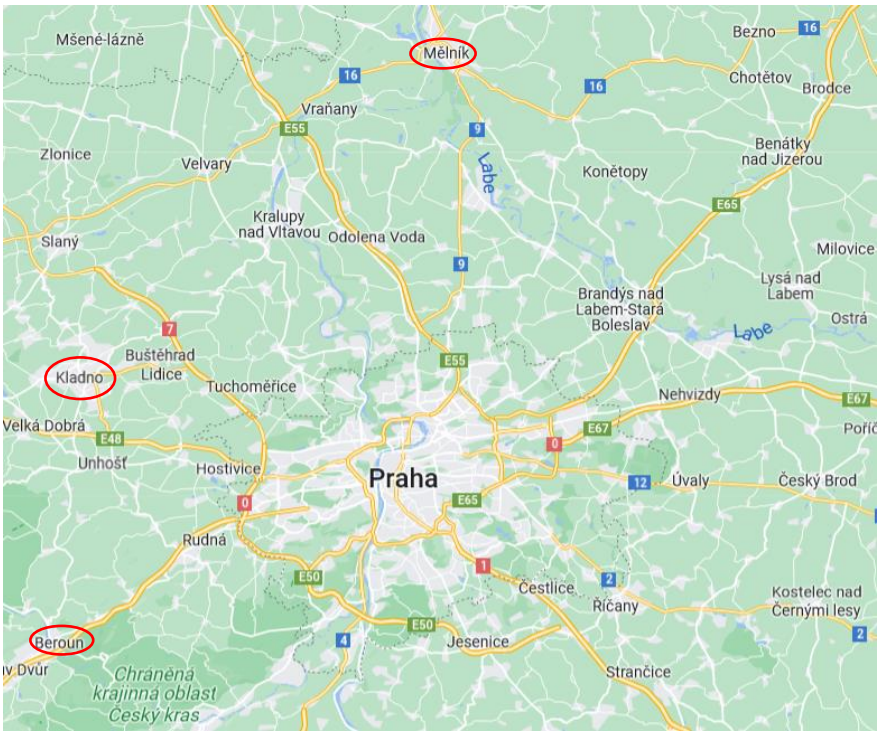
- from the last store visited, select the route to the distribution centre.

Elaboration

Before processing, the previous map documents will be converted into the schema required by the solving procedure, and then its steps will be applied in the actual processing.



Overview map with the distribution centre and the serviced stores (www.google.com/maps):



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