

Data Structures and Algorithms

Exercise 11

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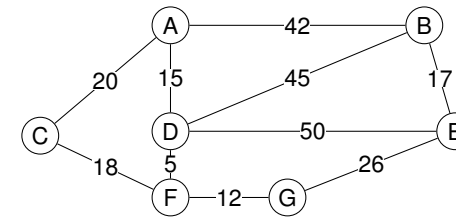
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Assignment 11

Task 1: Road Network

Several farms are connected with dirt roads as it is shown in the figure below. The edges are labeled with the distances between the farms in kilometers. The municipality wants to connect the farms with new two-lane concrete roads, but wants to save on the materials. Each farm must be reachable from any other farm by concrete roads.



Implement an algorithm that prints the roads which need to be upgraded taking in account the preferences of the municipality. Use the example network to test your algorithm.