

# Optical fiber

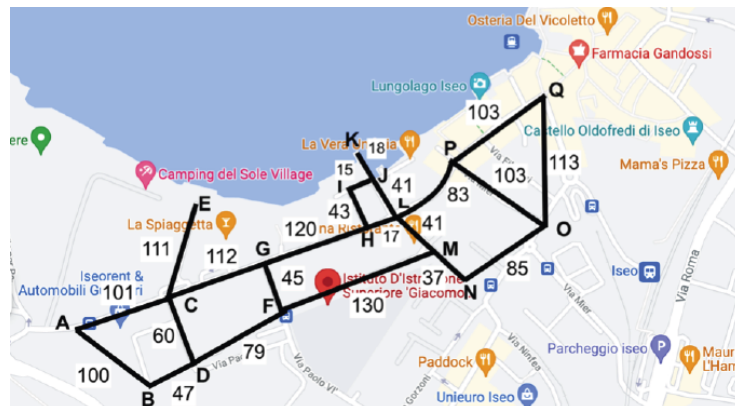
Difficulty level: beginner

## Keywords

- Graph theory
- Undirected graphs
- Kruskal's algorithm

## Problem description

In Iseo, most of the homes and buildings are reached by optical fiber. However, in the area represented on the map below, there are some public buildings of the Municipality (indicated with the letters A to Q) that have not yet been covered. Knowing that the company appointed by the Municipality of Iseo asks 5 euros for each meter of optical fiber, in which streets will the optical fiber be laid in order to minimize the total expense incurred by the Municipality?



## Tasks

1. Solve the problem by applying Kruskal's algorithm.