

5th Lab Session

ORLAB - Operations Research Laboratory

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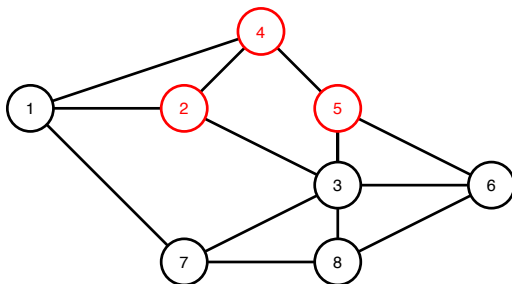
Politecnico di Milano, Italy

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Steiner Tree problem

Given a network topology $G = (V, E)$, with edge costs $c_e \geq 0$, we have to connect a given subset of vertices $T \subset V$ with a tree of minimum cost.

Consider the topology given in the Figure below, and let T be $\{2, 4, 5\}$. Write the Integer Linear Programming formulation of this problem and solve the given instance (optimum value = 7).



- ▶ Lab sessions web site:
<http://home.dei.polimi.it/gualandi/FRO-D>
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- ▶ Reference Guide to AMPL
http://.../FRO-D/ampl_examples.pdf