

VG441 HOMEWORK 3

You are encouraged to type your answer using LaTeX, but scanning document is acceptable. The due date of the homework is on Canvas.

Problem 1

Formulate the set cover problem as a mixed integer linear program (MILP). Define decision variables, objective, and constraints clearly. Solve the problem on Page 4 of LEC015 using Gurobi. **(20 pt)**

Problem 2

Prove that the greedy rule is optimal for the Fractional Knapsack Problem. **(20 pt)**