

ILP project

Ben Rosenberg

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Overview

- ▶ OR-Tools for ILP
- ▶ Project description
- ▶ Requirements, submission, grading

OR-Tools for ILP

(Demo: OR-Tools for ILP, set cover problem)

Project description

- ▶ Each student's EMPLID corresponds to a Sudoku puzzle that is deterministically generated on a page on the course site
- ▶ You need to formulate an ILP to solve your Sudoku puzzle, using OR-Tools to confirm your formulation works as intended

Requirements

- ▶ You must solve the problem that you are given by your number
- ▶ You must use OR-Tools with integer linear programming
- ▶ You should submit a Jupyter notebook (.ipynb format)
- ▶ You should give the constraints as part of your submission, in the Markdown cells of the notebook
- ▶ I should not need to run your file on my end, it should have all the outputs “pre-run” and included in your file
- ▶ You should use Python in the Jupyter notebook, not any other language

Submission/grading

Submit your Jupyter notebook file to Brightspace.

Grading:

- ▶ 50% problem formulation and description
- ▶ 40% OR-Tools implementation
- ▶ 10% correct solution

AI tools/external resources reminder

Use whatever resources you feel comfortable with.

There are no restrictions.