

Report 3

Team information.

- Team leader: Andrei Pavlov - 5/5 points
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Link to the product.

- The product is available: <https://github.com/Bulatypov/optimization-homework>

Programming language.

- Programming language: C++ 20

Input

The input contains:

- vector of coefficients of supply - S.
- matrix of coefficients of costs - C.
- vector of coefficients of demand - D.

Output/Results

The output contains:

- The string "The problem is not balanced!" or
- Print (demonstrate) input parameter table (a table constructed using matrix C, vectors S and D). or
- 3 vectors of initial basic feasible solution - x_0 using North-West corner method, Vogel's approximation method, and Russell's approximation method.

Tests

Test:

S: [300 400 500]

C: [[3 1 7 4] [2 6 5 9] [8 3 3 2]]

D: [250 300 400 200]

Answers:

Left-corner method: 4400

Vogel method: 2850

Russel method: 2850

Code

Link to github provided at the top of the report