Laboratorio #1

Ejercicio 3.

- Función objetivo:
    - Minimizar: z = x1 + x2 + x3 + x4 + x5 + x6

- Sujeto a:
    - x1 + x6 >= 4
    - x1 + x2 >= 8
    - x2 + x3 >= 10
    - x3 + x4 >= 7
    - x4 + x5 >= 12
    - x5 + x6 >=4
    - x1,x2,x3,x4,x5,x6 >= 0

- Resultado:

```
PS D:\Documentos\Modelación y Simulación> julia Ejercicio3.jl
Running HiGHS 1.11.0 (git hash: 364c83a51e): Copyright (c) 2025 HiGHS under MIT licence terms
LP   has 6 rows; 6 cols; 12 nonzeros
Coefficient ranges:
  Matrix [1e+00, 1e+00]
  Cost   [1e+00, 1e+00]
  Bound  [0e+00, 0e+00]
  RHS    [4e+00, 1e+01]
Presolving model
6 rows, 6 cols, 12 nonzeros  0s
6 rows, 6 cols, 12 nonzeros  0s
Presolve : Reductions: rows 6(-0); columns 6(-0); elements 12(-0) - Not reduced
Problem not reduced by presolve: solving the LP
Using EKK dual simplex solver - serial
  Iteration        Objective     Infeasibilities num(sum)
          0     0.0000000000e+00 Pr: 6(45) 0s
          5     2.6000000000e+01 Pr: 0(0) 0s
Model status        : Optimal
Simplex   iterations: 5
Objective value     :  2.6000000000e+01
P-D objective error :  0.0000000000e+00
HiGHS run time      :          0.03
x1 = 4.0
x2 = 4.0
x3 = 6.0
x4 = 1.0
x5 = 11.0
x6 = 0.0
z = 26.0
PS D:\Documentos\Modelación y Simulación>
```