1. python – cvxopt

전략 -random하게 뽑고

0. beispielscode

<https://cvxopt.org/examples/tutorial/qp.html>

conda install -c conda-forge cvxopt

1.1 랜덤변수 10\*10

import time

from cvxopt import matrix, solvers, cvxopt

import numpy as np

start = time.time()

Matrix10 = np.load(r'C:\Users\skqkr\Desktop\Semesterarbeit/Chiwan\_Q1.npz')

Q = matrix(Matrix10['Q'])

p = matrix(Matrix10['p'])

G = matrix(Matrix10['G'])

h = matrix(Matrix10['h']) ## Rechte Seite von der Ungleichung

## use the LDL KKT-solver with regularization

sol = cvxopt.solvers.qp(Q, p, G, h, kktsolver='ldl', options={'kktreg':1e-9})

print(sol)

print(sol['x'])

print("time :", time.time() - start)

-2. 100\*100

-3. 500\*500

-4. 1000\*1000

-5. 2500\*2500

-6. 5000\*5000