

### **Programming Homework**

1. Define a **quadratic programming** (i.e., quadratic objective function with linear constraints) problem by yourself.
2. Write the program of the **Interior Point Method** to solve the quadratic programming problem by Matlab, C, C++, or Python.
3. Solve the quadratic programming problem by using the function “quadprog” in MATLAB.
4. Compare the results of Steps 2 and 3 for different scales or parameters in your quadratic programming model.
5. Write the report of this programming exercise.