

Terminal solutions for lecture 1. Granted, there could be some mistakes so remain curious and check own results very well.

Lecture 1

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A      Matrix 3x3:
      1      2      3
      2     -4      6
      3     -9     -3

b      Vector 3D:
      5      18      6
The LU version in Eq. (2.3.14) Matrix 3x3:
      1      2      3
      3     -15     -12
      2     0.533333    6.4

L      Matrix 3x3:
      1      0      0
      3      1      0
      2     0.533333    1

U      Matrix 3x3:
      1      2      3
      0     -15     -12
      0      0      6.4

x      Vector 3D:
      1     -1      2
L*U    Matrix 3x3:
      1      2      3
      3     -9     -3
      2     -4      6

L*U*x  Vector 3D:
      5      6      18
A*x    Vector 3D:
      5      18      6

Pivoting bookkeeping from partial pivoting:
      0      2      2

```