

CE343 HOMEWORK -3-
Due on 01.11.2019

$$-2x_1 + 5x_2 + x_3 = 4$$

$$2x_1 - x_2 + 6x_3 = 7$$

$$8x_1 + 4x_2 - x_3 = 11$$

- a) Check whether system is ill-conditioned or well-conditioned
- b) Apply partial pivoting to the system and check whether system is ill-conditioned or well-conditioned, comment on this.
- c) Solve the unknowns by LU decomposition
- d) Obtain the inverse of coefficient matrix by LU decomposition