PROBLEM SET 1 (DUE: FEB 6, WED)

1. Do Exercise 1.2.21. in [OS18].

2. Do Exercise 1.2.23. in [OS18]. (You do not need to justify your answer.)

3. Do Exercise 1.3.21. in [OS18]. (You do not need to write down a rigorous proof, but explain how you get such an LU factorization in each case.)

4. Do Exercise 1.3.27. in [OS18]. If it is true, then provide a proof. Otherwise, give a counterexample.

REFERENCES