

Homework Assignment for Week 09

Assigned Nov 11, 2011.

1. Section 6.6: Problems 17, 20, 21, 25.
2. Denote by A_k the $k \times k$ leading principle of A . Show that if $A_k = L_k U_k$ with L_k unit lower triangular ($(L_k)_{ii} = 1$) and U_k upper triangular, then $\det(A_k) = \det U_k$. Use it to prove Theorem 6.24 (except the stable part).
3. Preview Algorithms 6.5, 6.6 and 6.7. We will explain them and talk about implementation next week.