## HOMEWORK 18 DISCRETE MATHEMATICS II DUE 04-10

(1) In class, we discussed adjacency matrices for simple (no loops or multiple edges), undirected graphs.
(a) How should we define the adjacency matrix of an undirected graph with loops or multiple edges?
(b) How should we define the adjacency matrix of a directed graph?
(c) $\# 10.3 .15,16,23$.

- Five book problems: \#10.3.57, 58; \#10.4.7, 24, 25. See Example 10.2.13 on p. 658 for the definition of $K_{3,3}$.

