

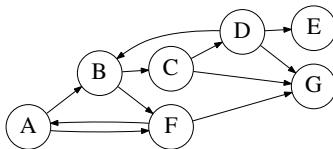
**Today:** Elementary graph algorithms; strongly connected components. 22.\*

**Next class:** (after Spring Break) Shortest paths, contd. 24.{3,4,5}.

**Reminders:** Homework. Newsgroup. Reading. Coding. Practice. Don't fall behind.

1. List the members of your group below. Underline your name.
  
2. Depict a directed graph that has three strongly connected components, each with at least three vertices. Try to design your graph so that a quick glance at the graph does not reveal the number of connected components.

3. Trace the operation of STRONGLY-CONNECTED-COMPONENTS (p. 617) on the following graph. You do not need to show the details of each DFS invocation, but you should annotate vertices with the  $u.f$  values.



[additional space for answering the earlier question]

4. (self study) Repeat Question 3 on the graph of Question 2.