

IN2010 oppgaver uke 41

Oppgave 1 (fra boka)

- C-13.3
- R-15.3

Oppgave 3 (Bikonnektivitet)

Let G be the undirected graph in Fig. 1 (next page).

1. Is G biconnected?
2. If not, find the articulation point (separasjonsnode) in G . Show the depth-first search spanning tree. Indicate back edges. You should also indicate the value of $\text{low}(v)$ and $\text{index}(v)$ for each node v in the graph.

Oppgave 4 (Sterkt sammenhengende komponenter)

Let G be the directed graph in Fig. 2. Compute the strongly connected components of G by using the algorithm from the week 41 lecture videos.

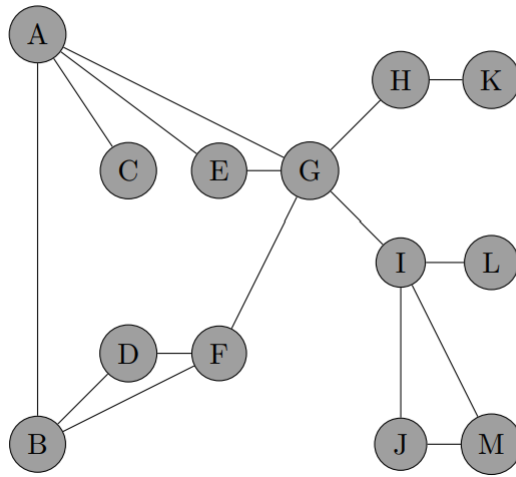


Fig. 1

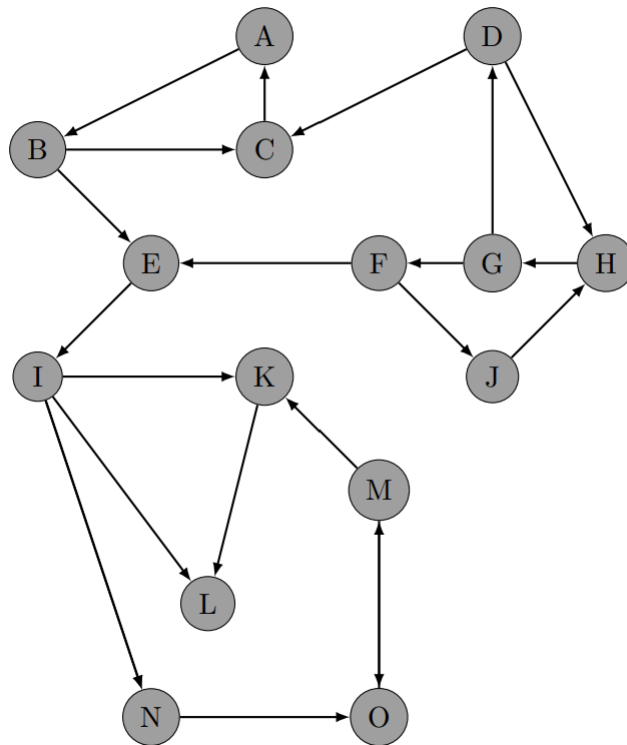


Fig. 2