Data structures and Algorithms LAB – BSDSF21

(Morning and Afternoon)

Lab 13 – 18-04-2023

You are provided code for fundamental functionalities of Tree, Binary Tree and Graph. The code is already discussed in class but briefly.

Tasks:

- On paper draw a suitable tree and update the main logic for that tree. Run code and observe output.
- On paper draw a suitable binary tree and update the main logic for that tree. Run code and observe output.
- On paper draw a suitable graph and update the main logic for that graph. Run code and observe output.

- Write iterative logic function to traverse tree but use queue instead stack. You may use list as Queue. Observe the sequence of the output for the general tree provided.
- Write iterative logic function to traverse binary tree but use queue instead stack. You may use list as Queue. Observe the sequence of the output for the binary tree provided.
- Write iterative logic function to traverse graph but use queue instead stack. You may use list as Queue. Observe the sequence of the output for the graph provided.

- Write iterative logic function to traverse graph using stack. Run code and observe output for the graph provided.

********* The end *********

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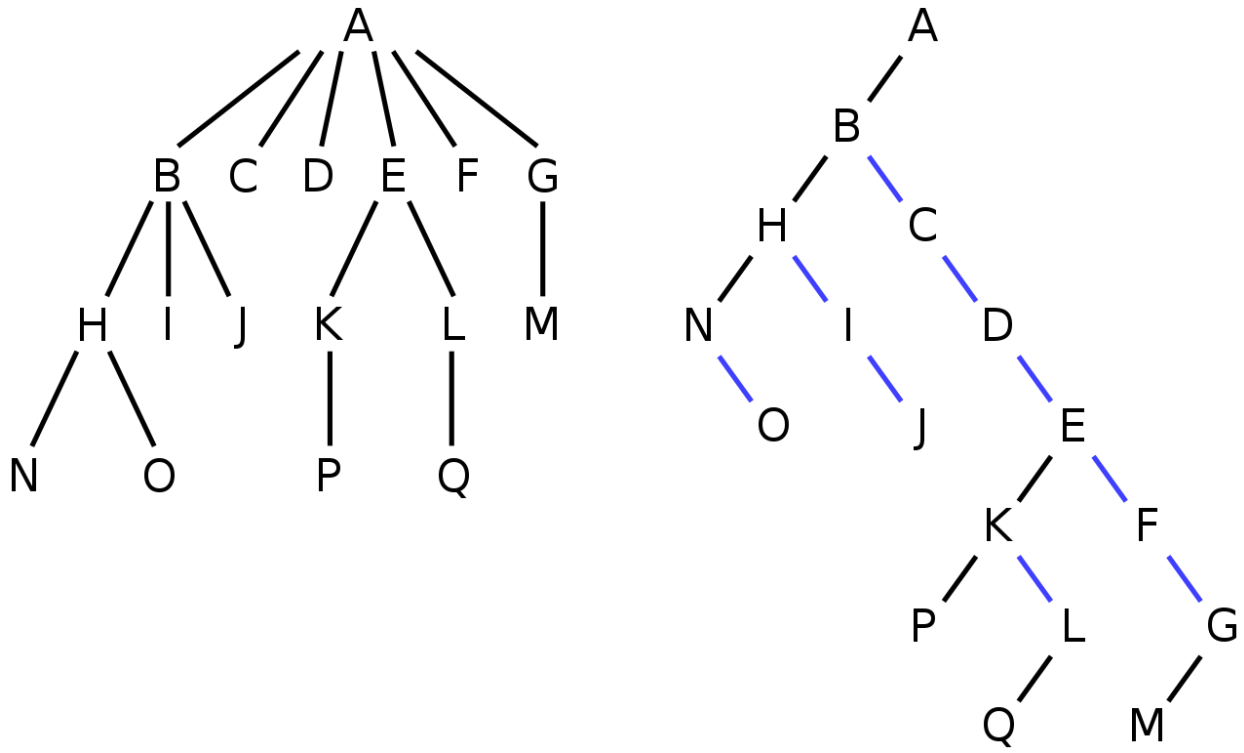
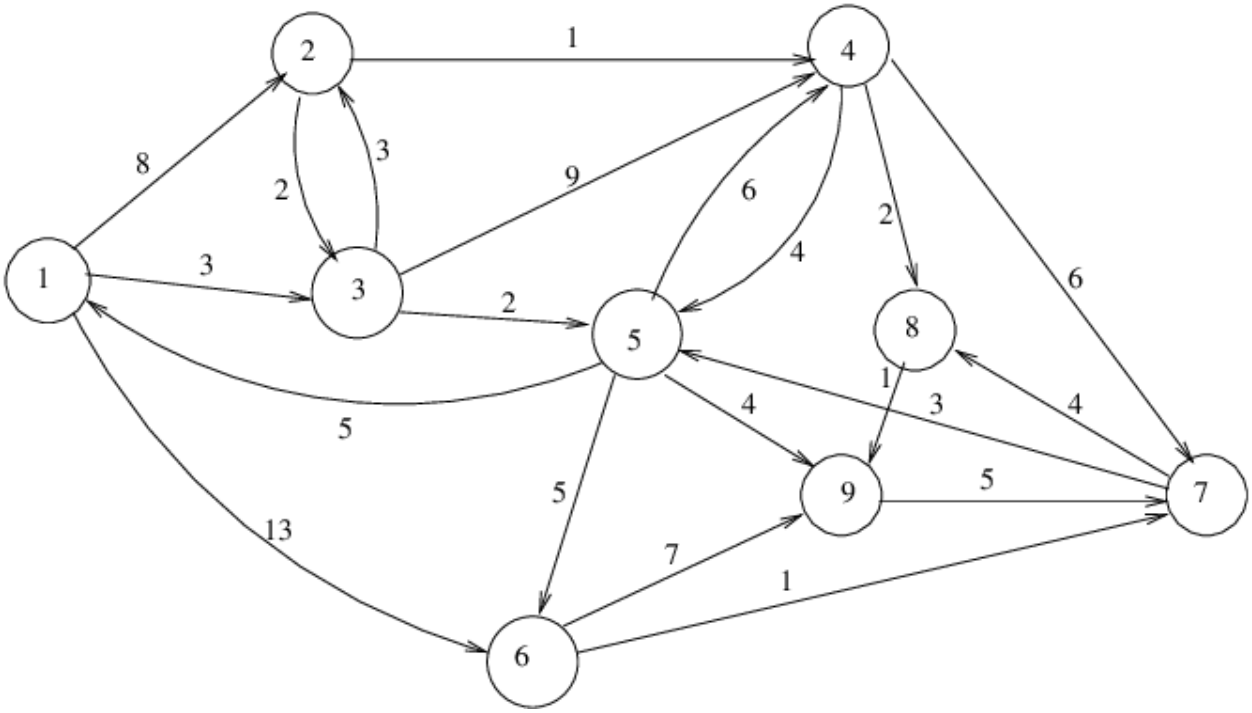


Left: a General Tree, Right: A binary Tree.



A weighted Graph, you may ignore weights on edges