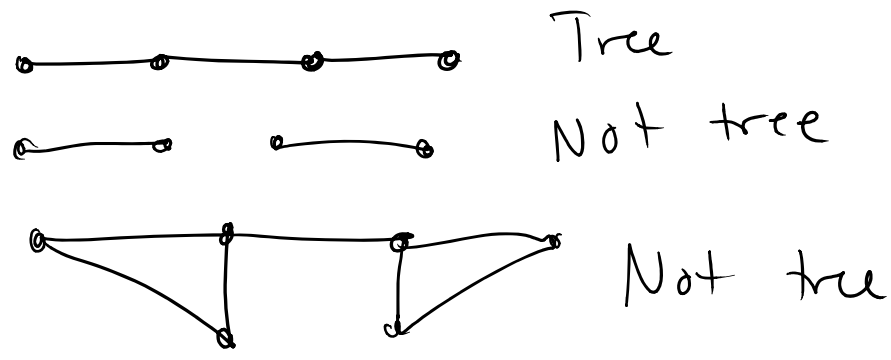
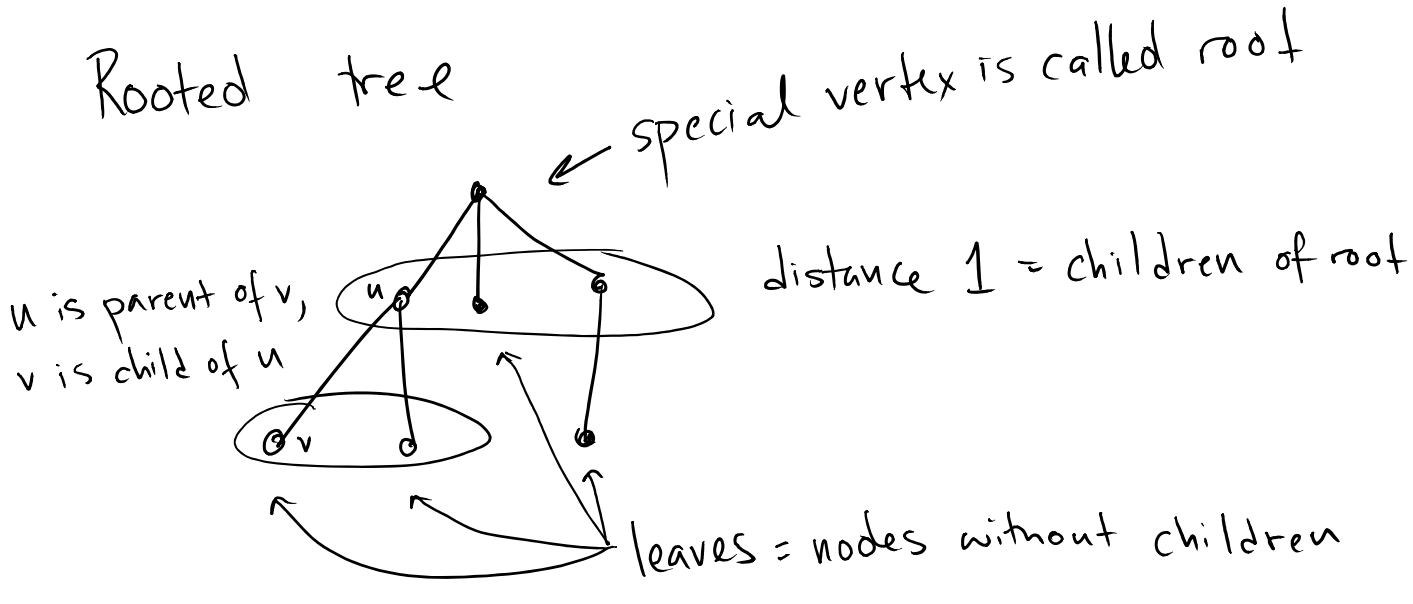


Trees - connected graph with no cycle

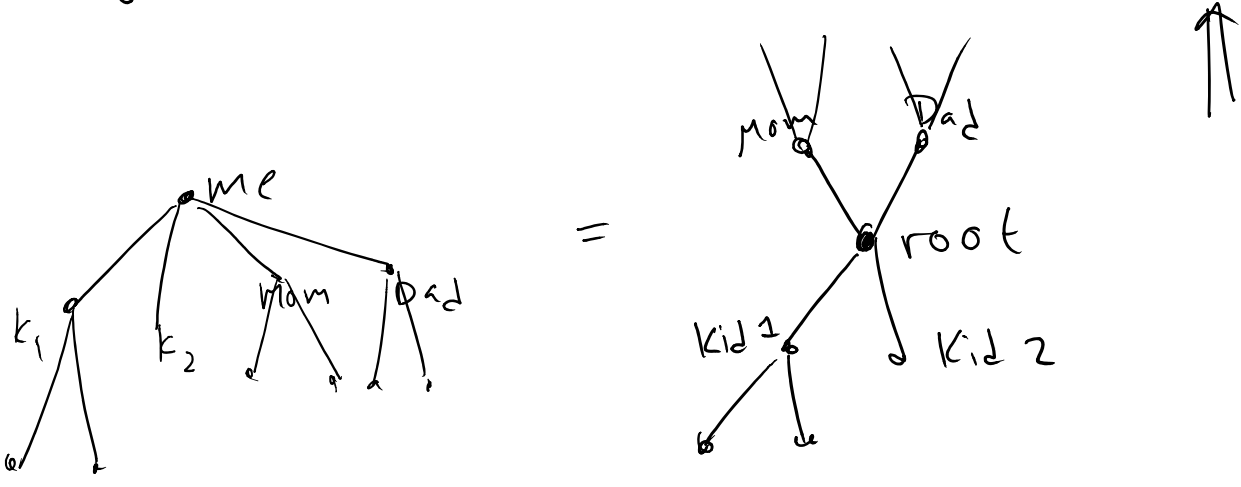


Rooted tree



Q: Consider family tree. If I am the root, which nodes are child nodes of me?

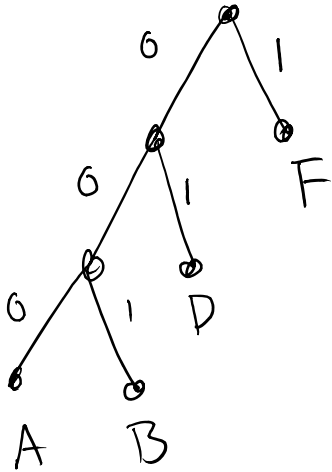
- A) My children
- B) My Parents
- C) Children & Parents



def: An k-ary tree is a rooted tree where every node has at most k children.

Most Famous in Computer Science: Binary Tree
||
2-ary tree.

Cool use for binary trees: Codes from letters to bits



AFFDB
000110100B

What is
00100001100001

When leaves are letters, easy to recover original word.