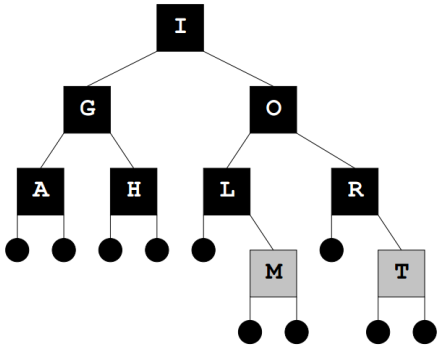
COMP 550, Spring 2015
Assignment 6
DUE: 9:05 Apr 6, 2015

1) (24') Delete the letters "A,L,G" (one by one, in order) from the red black tree given below.



2) (24') CLRS 13-3 (a),(b) on page 333

   Hint, you may use the following fact:

   Fibonacci numbers: $F_0=0$, $F_1=1$, $F_i = F_{i-1}+F_{i-2}$ for any $i>1$;

   $F_{i+2} \geqslant \varphi^i$, where $\varphi = 1.61803399$ is the golden ratio.

3) (16') CLRS 22.1-1 on page 592

4) (24') CLRS 22.2-1 on page 601 (Fig 22.2(a) is on page 590)

5) (12') CLRS 22.2-5 on page 602

Rules for ALL HWs (in addition to the statements in the syllabus):

You are encouraged to discuss the problem sets and study together in group, but when it comes to formulating/writing solutions you must work alone independently; i.e., you should be able to explain your answer clearly to anyone else. Note that this says discuss in group — copying homework solutions from another student, from the Internet, solution sets of friends who have taken this course or one similar to it previously, or other sources will be considered **cheating** and referred to the student attorney general. *You must include a* ***signed honor statement*** *with each submission explicitly listing the people you worked with and stating that you completed the assignment in accordance with these rules.*