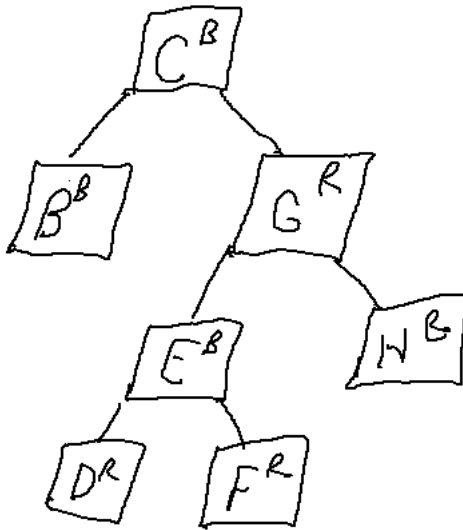


To the red-black tree below, add the nodes in the following order:

A

COW



ADD

1. Let x be the new node.
2. Color x red.
3. If x is the root, (i.e. if x 's parent is NULL), color x black, DONE!
4. If x 's parent is black, DONE!
5. If x 's uncle is red, color x 's parent and uncle black, color x 's grandparent red, reassign x to be x 's grandparent. RESTART with new x .
6. If x is a direct grandchild, rotate x 's parent up once, DONE!
7. Rotate x up twice, DONE!

Northern Michigan University (Marquette Co, MI)
 CS222-61-21W Data Structures (Andrew A. Poe)
 Practice Quiz 10
 Thursday 15 April 2021 10:00 A.M. EDT
 Time: 10 minutes

