

Outline

- Review homework and do some tree exercises
- Introduce tree balancing
- Introduce red-black trees
- Basic properties
 - Root property: the root is black
 - External property: every nil child pointer is considered a black node
 - Internal property: children and parents of a red node are black
 - Depth property: all nodes have the same black depth
- Insertion and balancing algorithms
- **Assignment**: implement red-black tree balancing

Resources

- [Red-black tree - Wikipedia](#)