

2124123 Trees

Tree =

- acyclic notation
- directed

4 ways to traverse:

- Preorder - root, leftmost, goes right LISP polish notation
- Inorder - left root right sorted tree regular a
- Post order - left right root hp calculators, stack order
- level order - uses a queue
- print by level

Binary search tree

- "Balanced" each node has 2 children, even, ideal

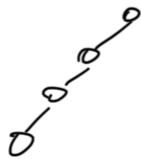
- depth of $\log n$ if n is # of nodes

- want random list, should come out balanced.
ordered list is bad

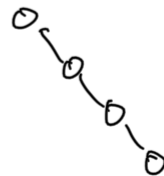
Un ordered:



ordered:



reverse ordered:



The more entropy, the more info being on