

§1 Augmented Data Structures

1. Red-black tree + Linked List
2. Order statistics.

§1.1 Order Statistics ADT

Operations:

1. Dictionary:
 - a) Insert
 - b) Delete
 - c) Search
2. Order:
 - a) $\text{Select}(k, D)$ Give you rank and ask for the element.
 - b) $\text{Rank}(x, D)$ returns the rank of item "x". The smallest has rank 1. The largest has rank n .