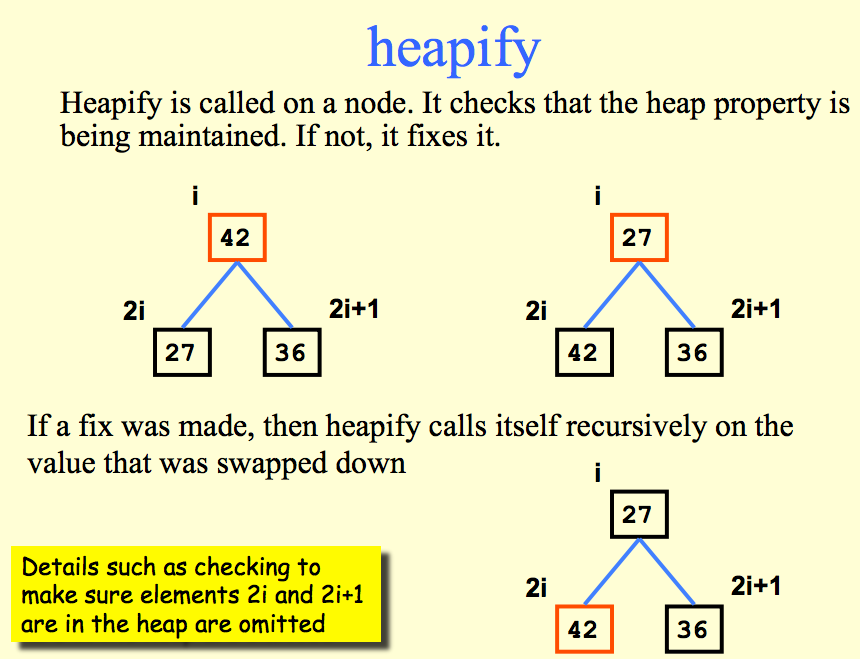
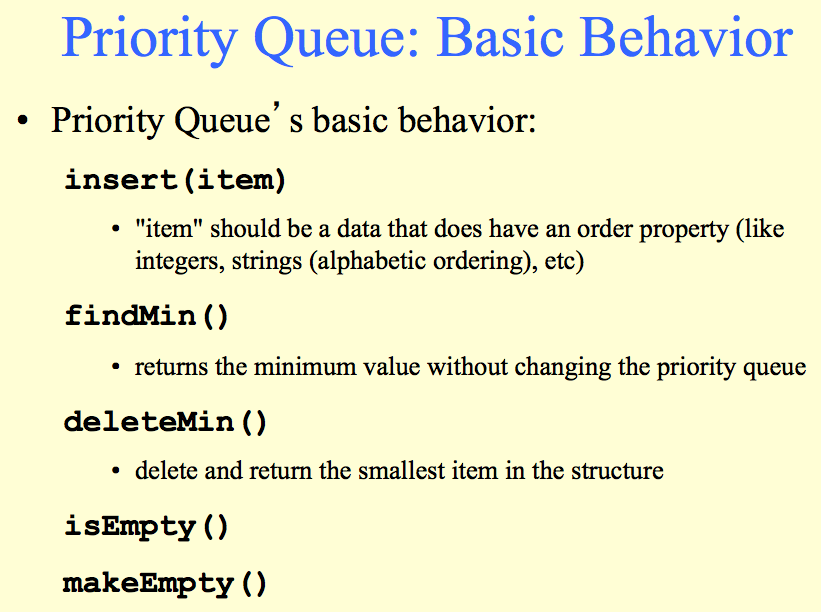
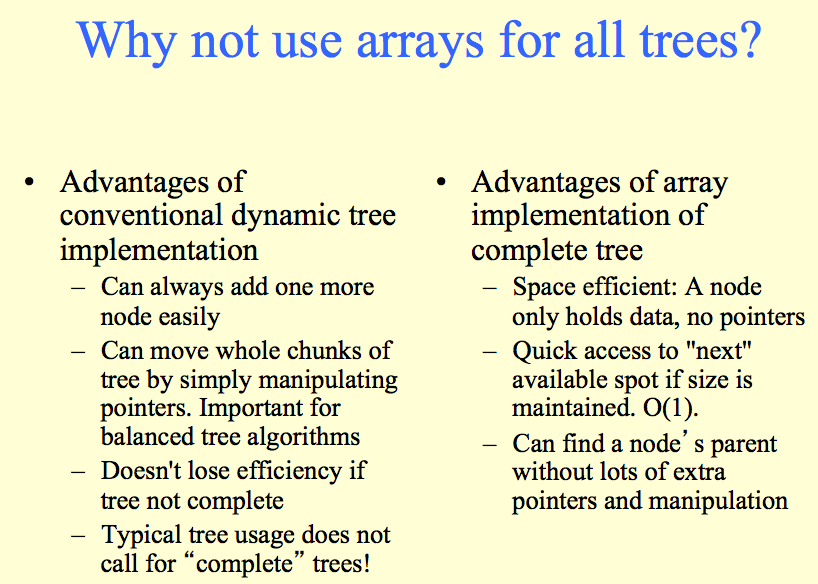
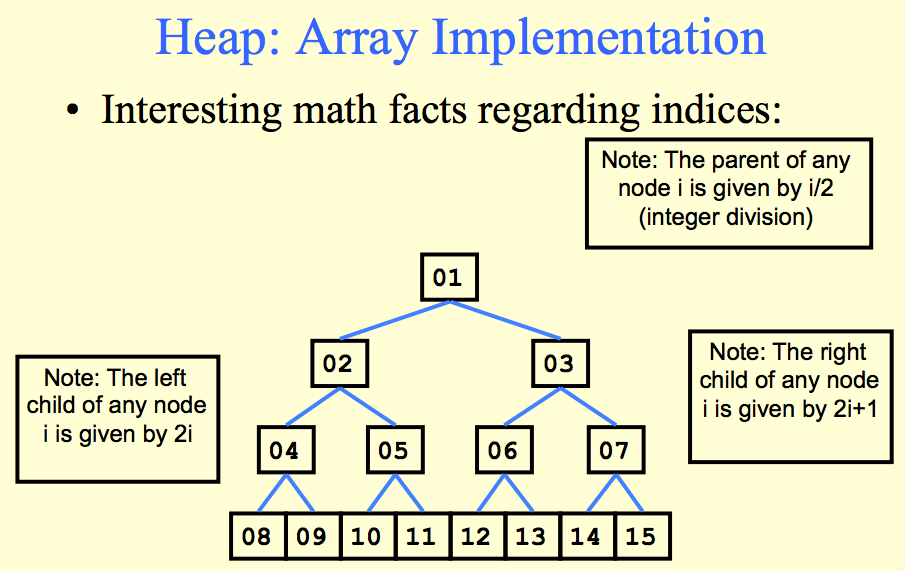
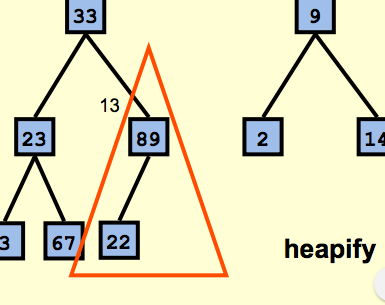
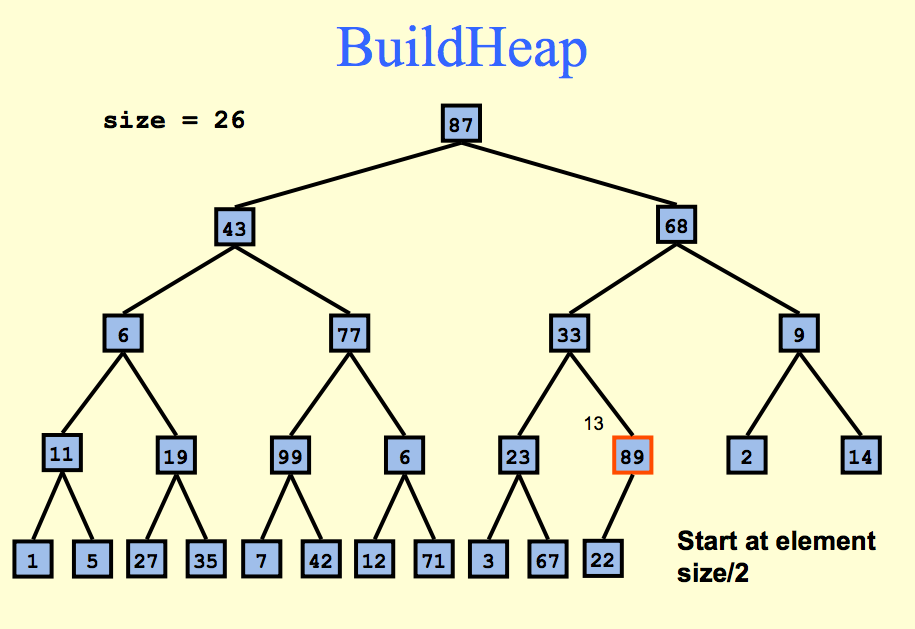
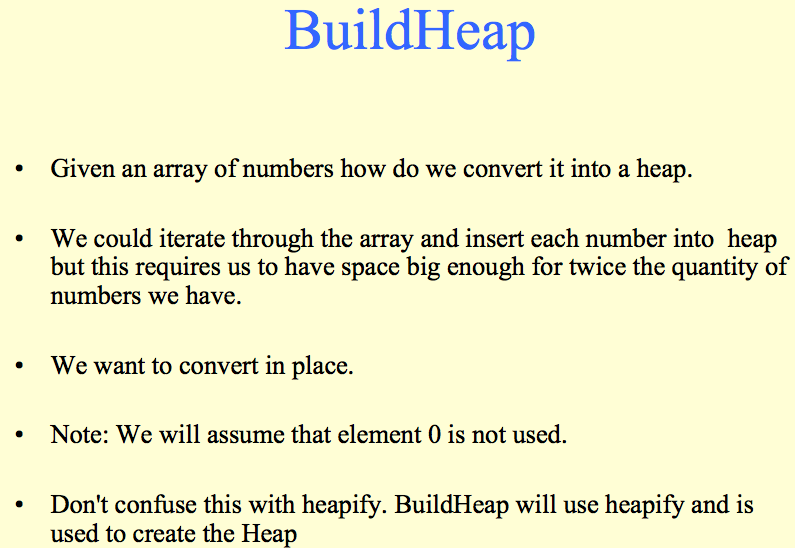
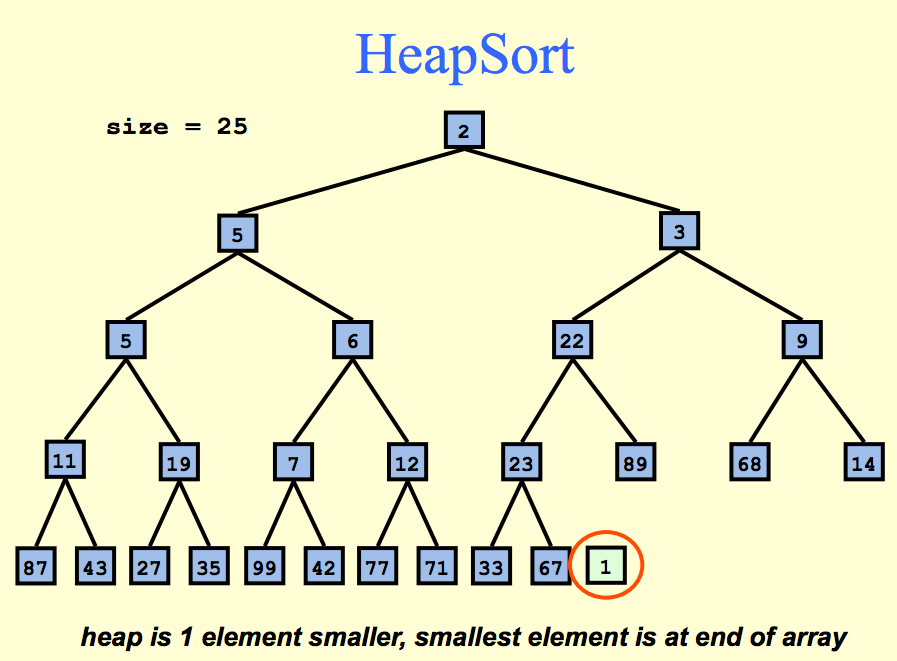
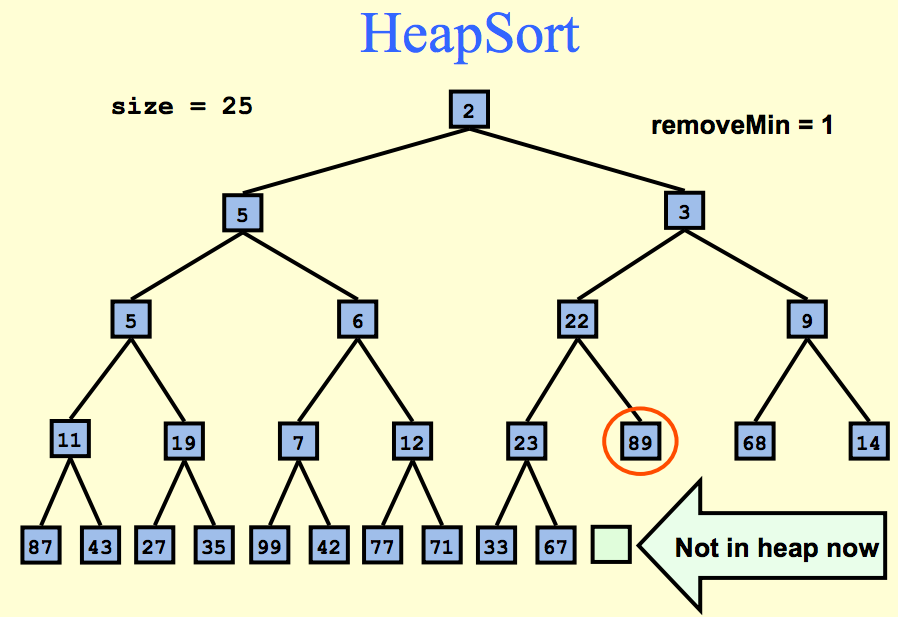
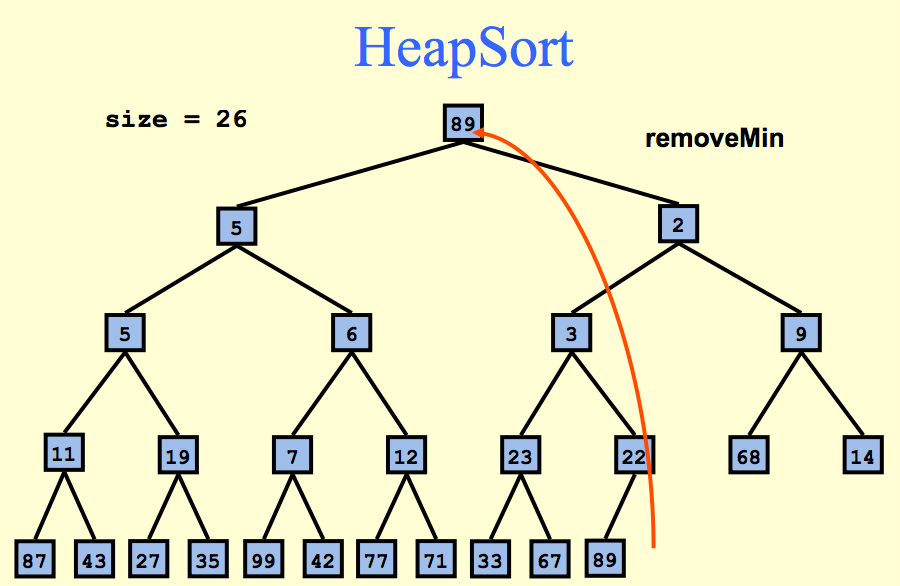
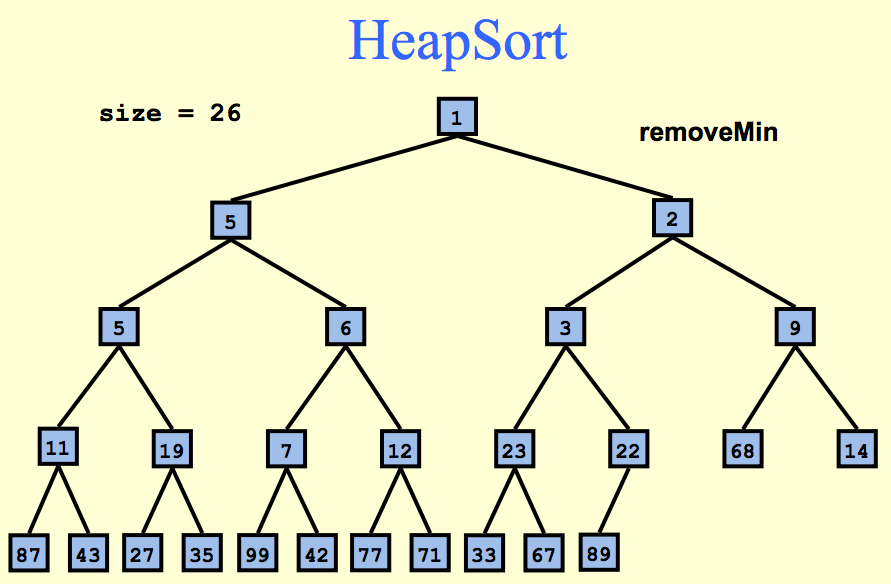
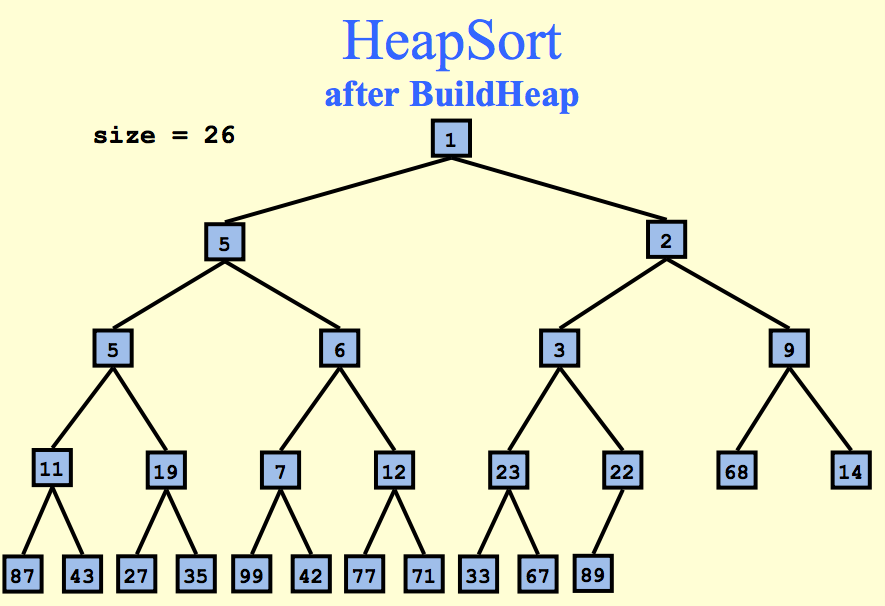
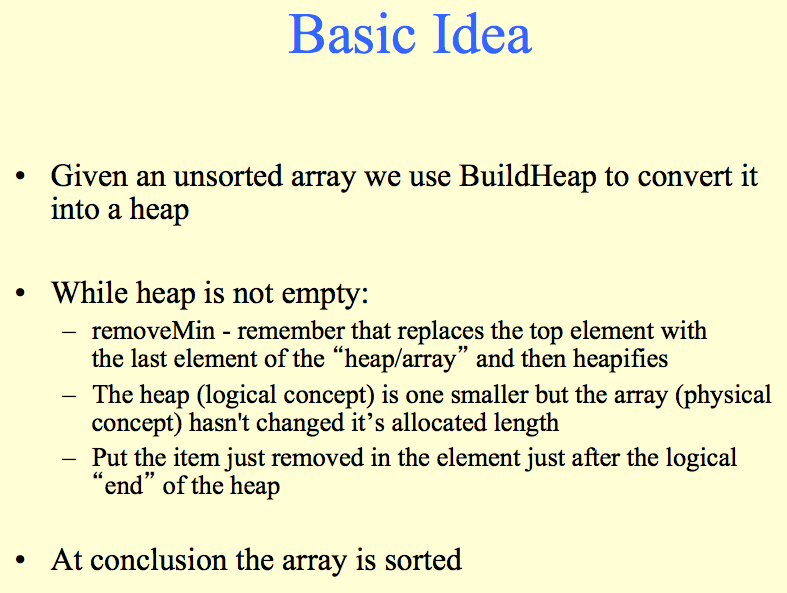
Heap 27

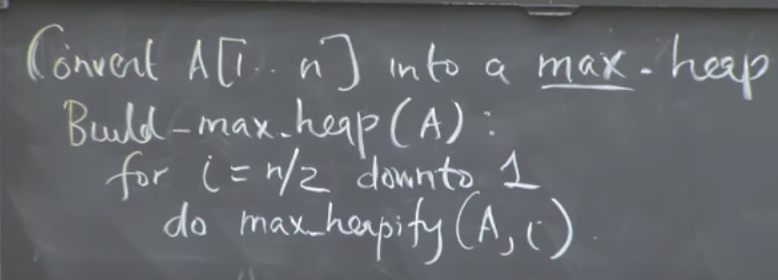




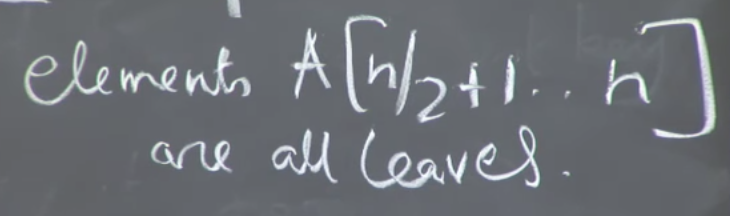




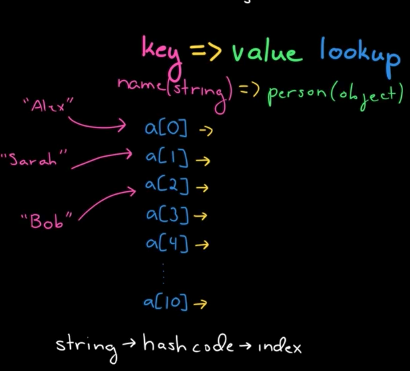
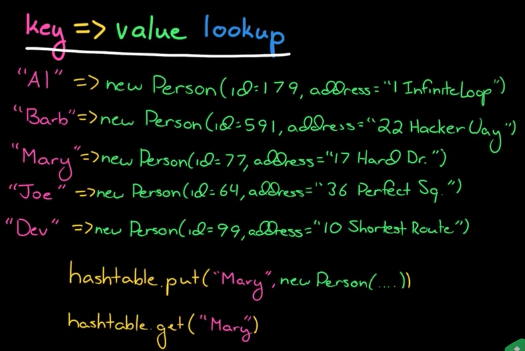
MIT Heap and Heap Sort



Why start with n/2 and going down to 1?

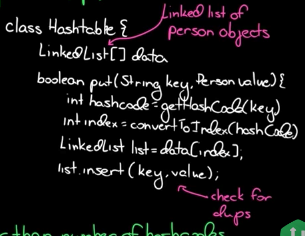


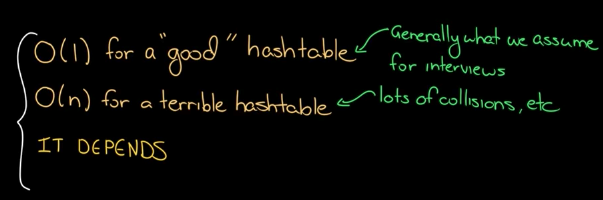
Hashmaps

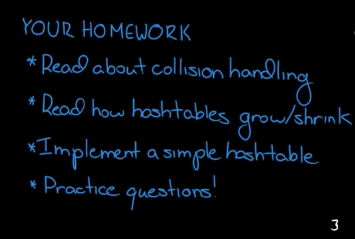


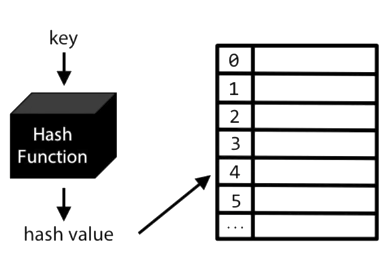
String goes into a hash function and gives a hashcode. Hashcode is actually not the index of the array because the array size might be smaller than the combination of all hashcodes.

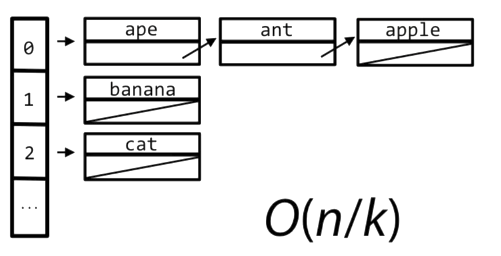
../../../Desktop/Screen%20Shot%202017-07-21%20at%202.51.05%20PM.

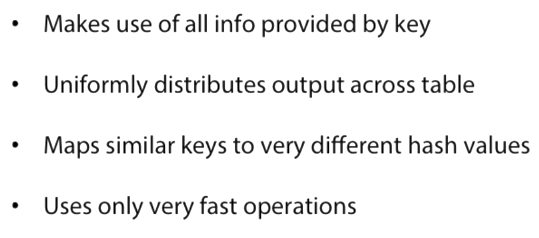


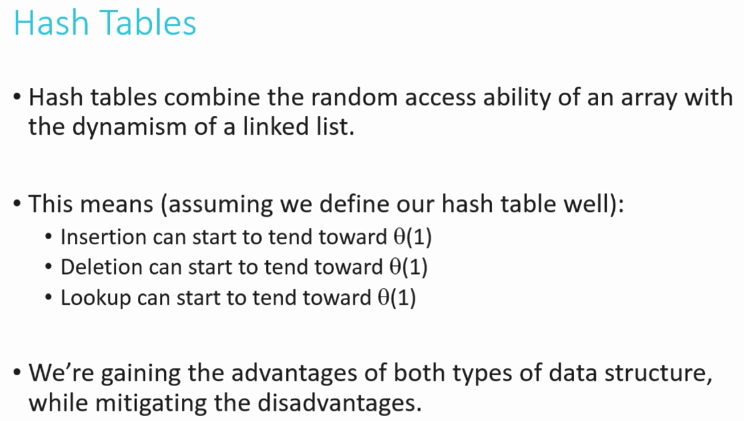




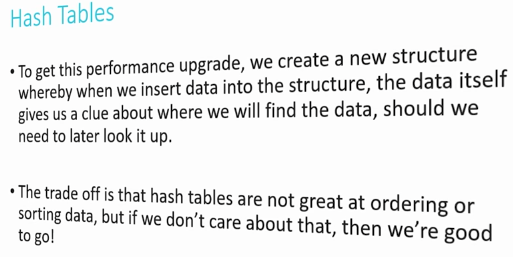
Key is data

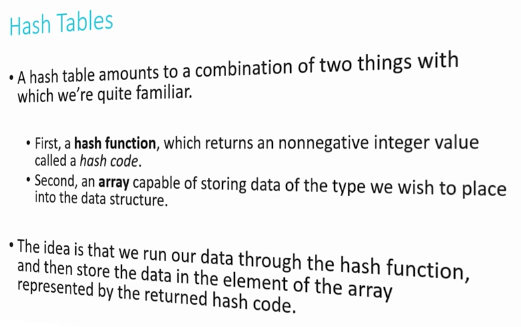


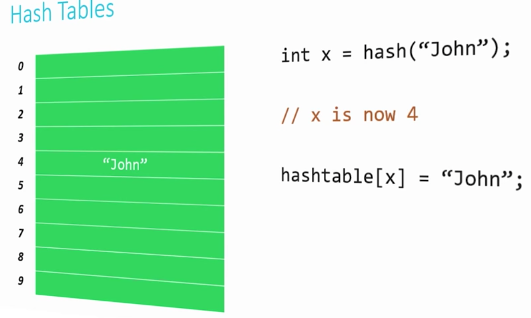


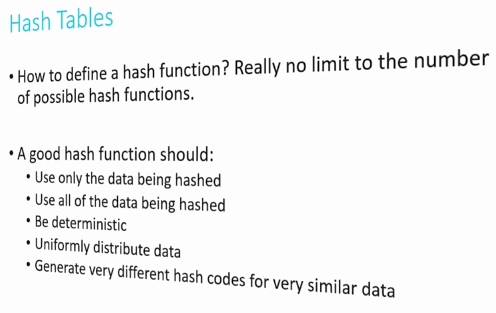


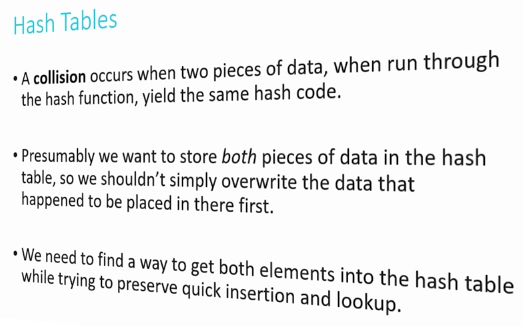
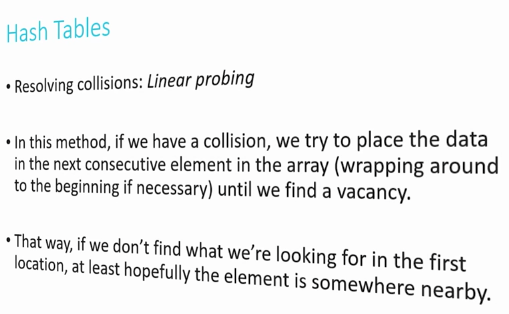
Theta is the average case

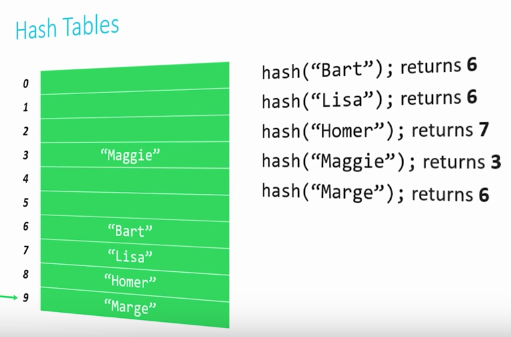


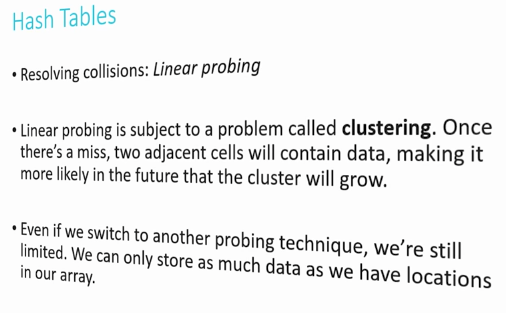


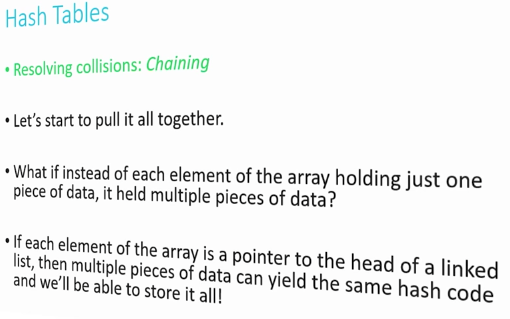


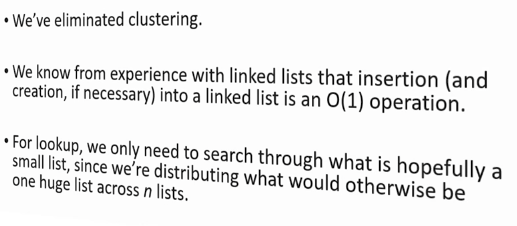


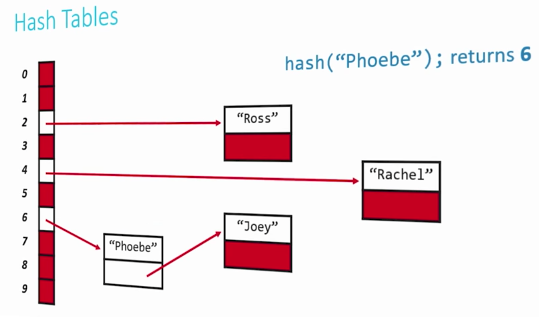


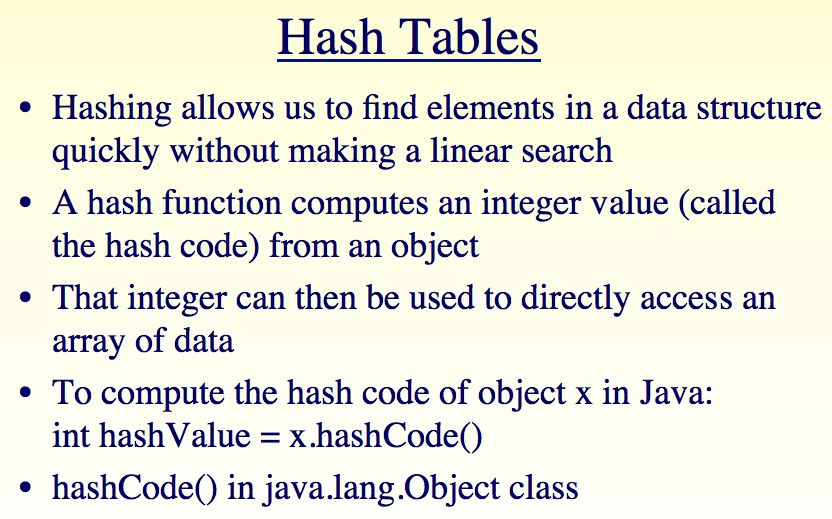


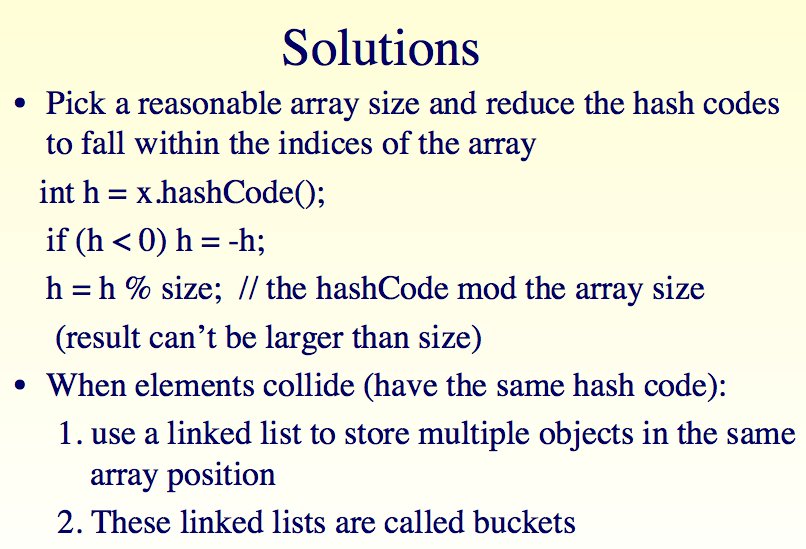
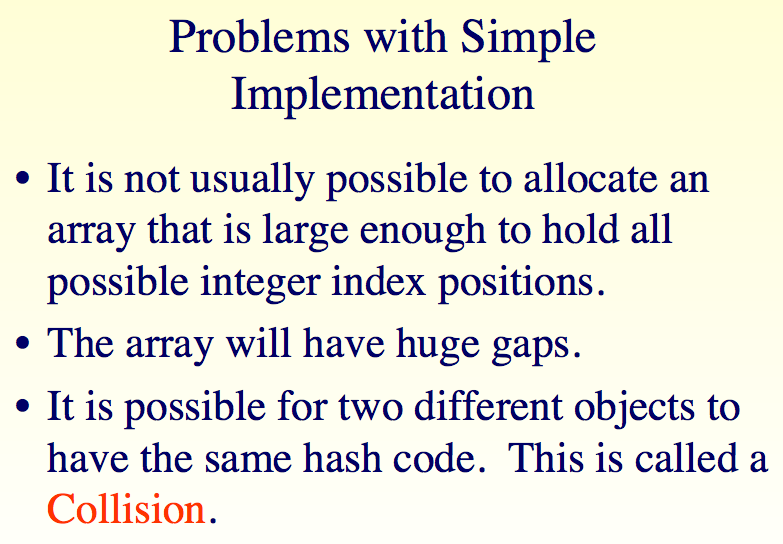
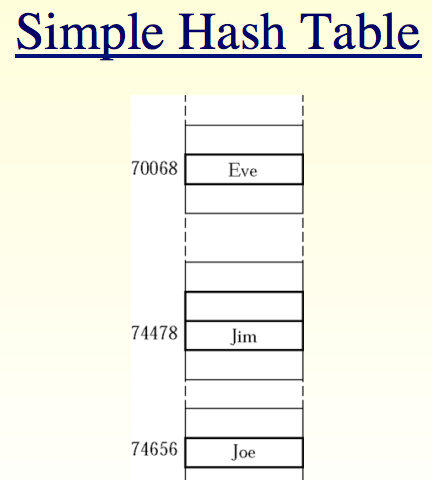












Pattern