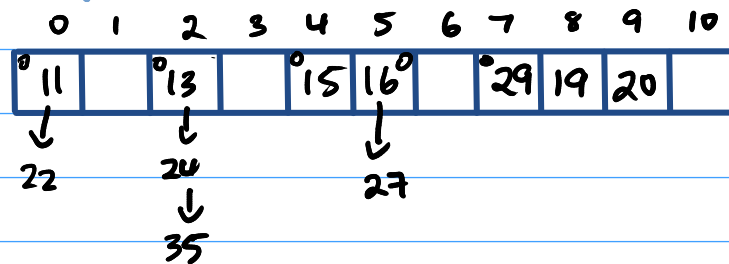


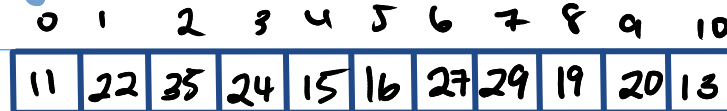
Hashing

Separate chaining: ~~11~~ ~~16~~ ~~27~~ ~~35~~ ~~22~~ ~~29~~ ~~15~~ ~~24~~ ~~24~~ ~~11~~ ~~13~~



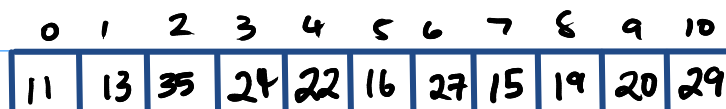
$$h(x) = x \% 11$$

Linear probing: ~~11~~ ~~16~~ ~~27~~ ~~35~~ ~~22~~ ~~29~~ ~~15~~ ~~24~~ ~~24~~ ~~11~~ ~~13~~



$$h(x) = x \% 11$$

Double hashing: ~~11~~ ~~16~~ ~~27~~ ~~35~~ ~~22~~ ~~29~~ ~~15~~ ~~24~~ ~~24~~ ~~11~~ ~~13~~



$$h(x) = x \% 11$$

$$h_2(x) = (x \% 3) + 1$$



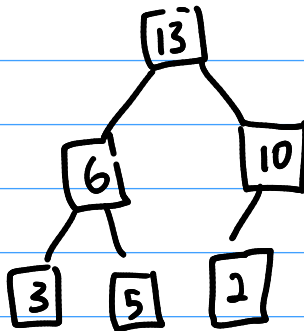
[Use separate chaining,
with sorted chains]

If we insert $k=2N$ items, then

	Best	Worst
#. key comps to do inserts		
Average #. of key comps per search		

Heaps

~~insert(10)~~ ~~insert(5)~~ ~~insert(15)~~ ~~insert(3)~~ ~~insert(16)~~
~~insert(13)~~ ~~insert(6)~~ ~~delete~~ ~~insert(2)~~ ~~delete~~



Tries

Words: ~~so~~ ~~boo~~ ~~jaws~~ ~~boon~~ ~~boot~~ ~~axe~~ ~~jaw~~ ~~boots~~ ~~soe~~

