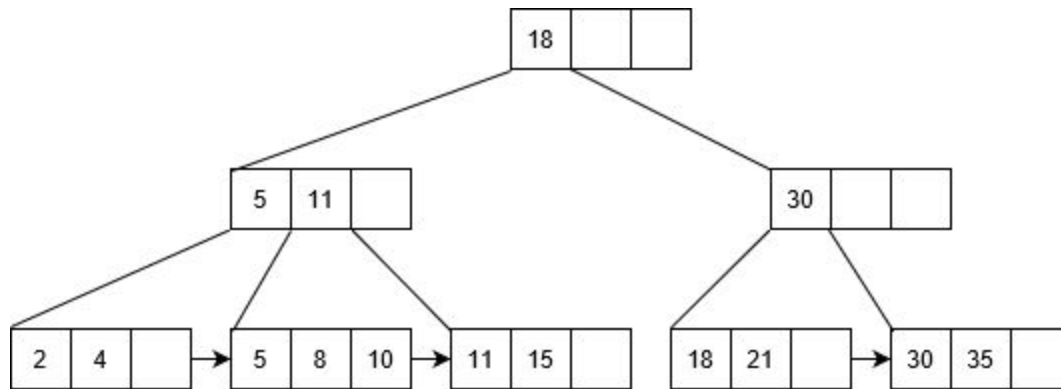


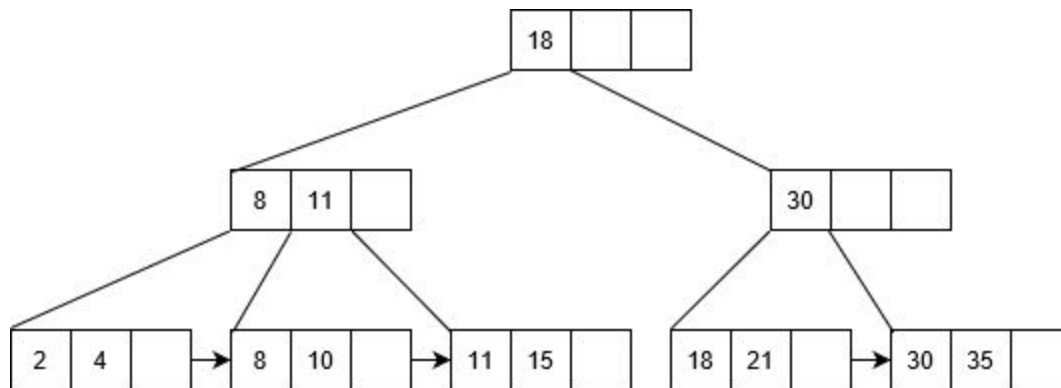
CS1555 hw8  
 siz11  
 Siming Zheng  
 4/16/18

4.

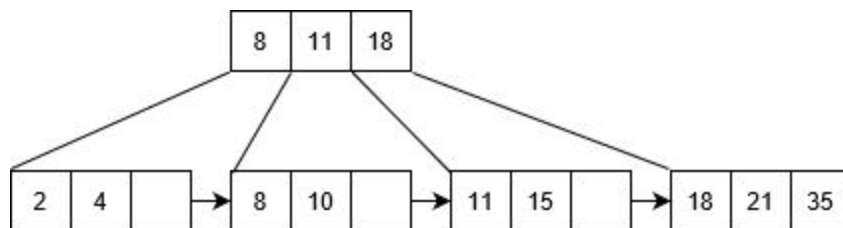


5.

(a)



(b)



6.

Since the formula for  $n$  items with  $k$  keys in  $l$  levels is  $l = \log(n,k)$ , upper bound  
 Level = upperbound( $\log(7525,9)$ ) = 5 levels