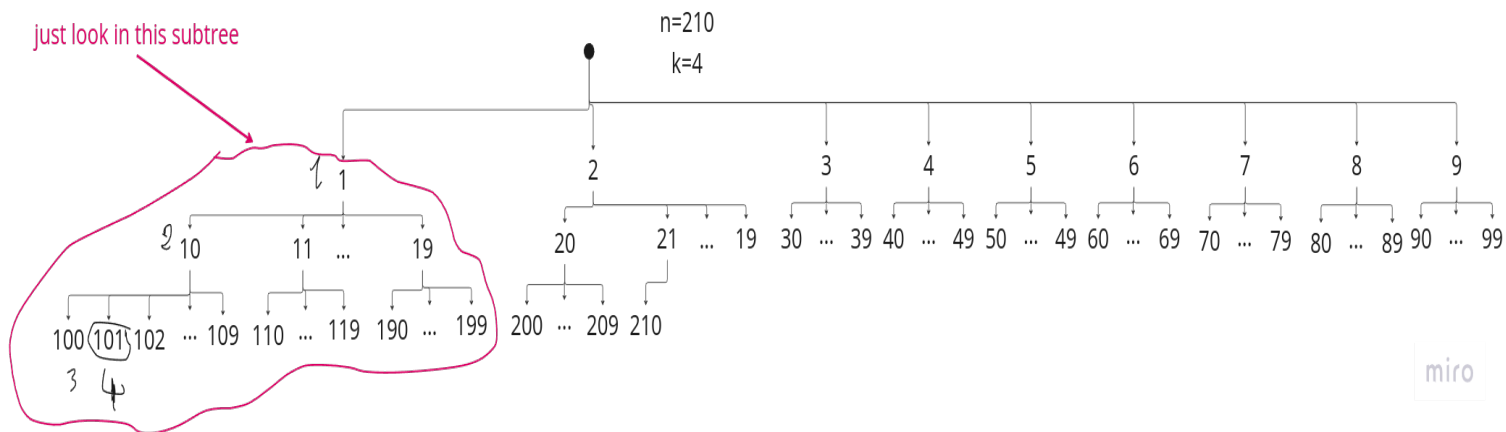


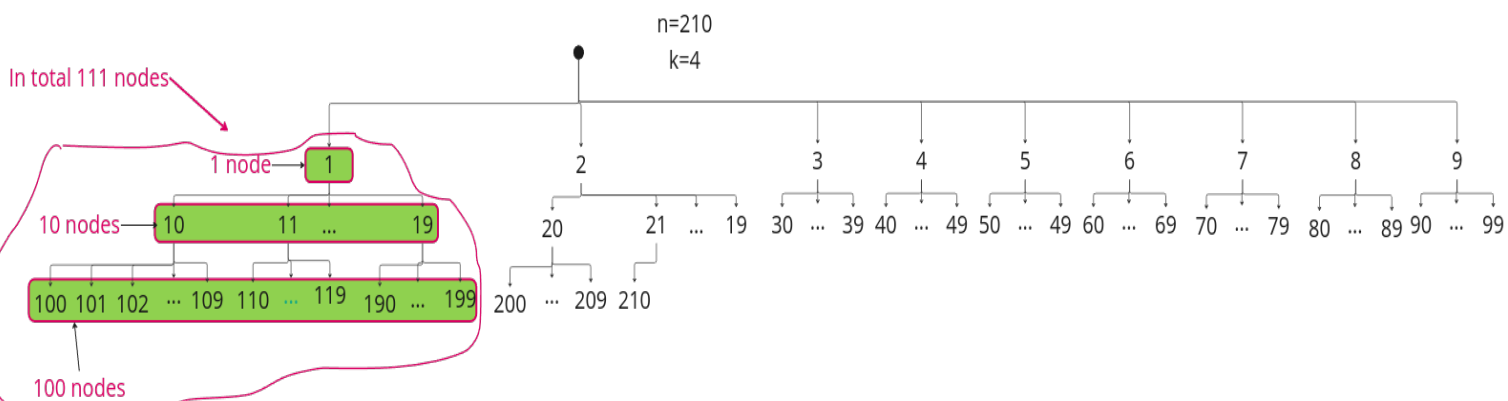
just look in this subtree



miro

How to know in which subtree to look?

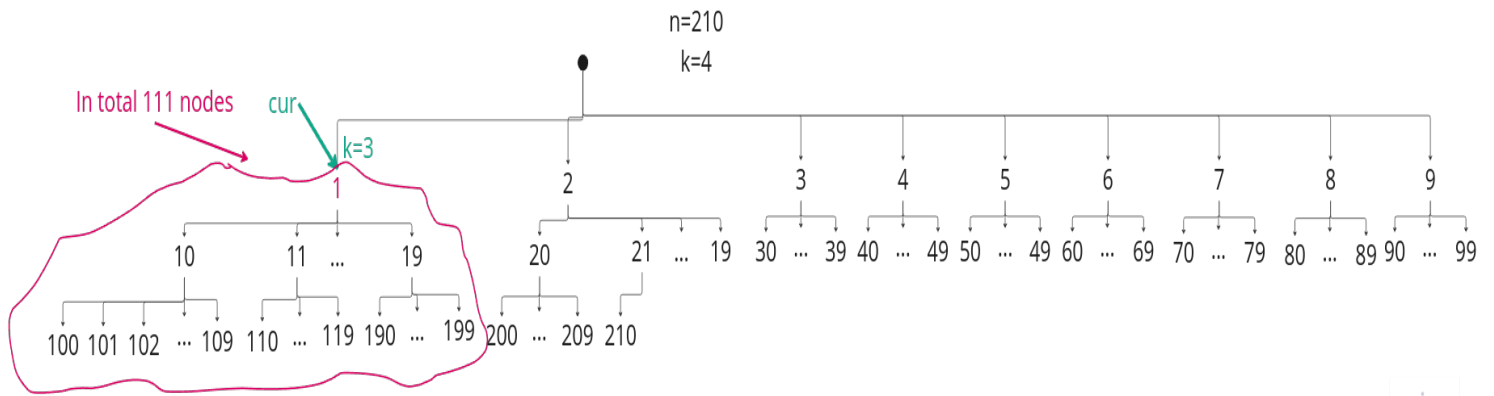
by counting the number of nodes of current node



miro

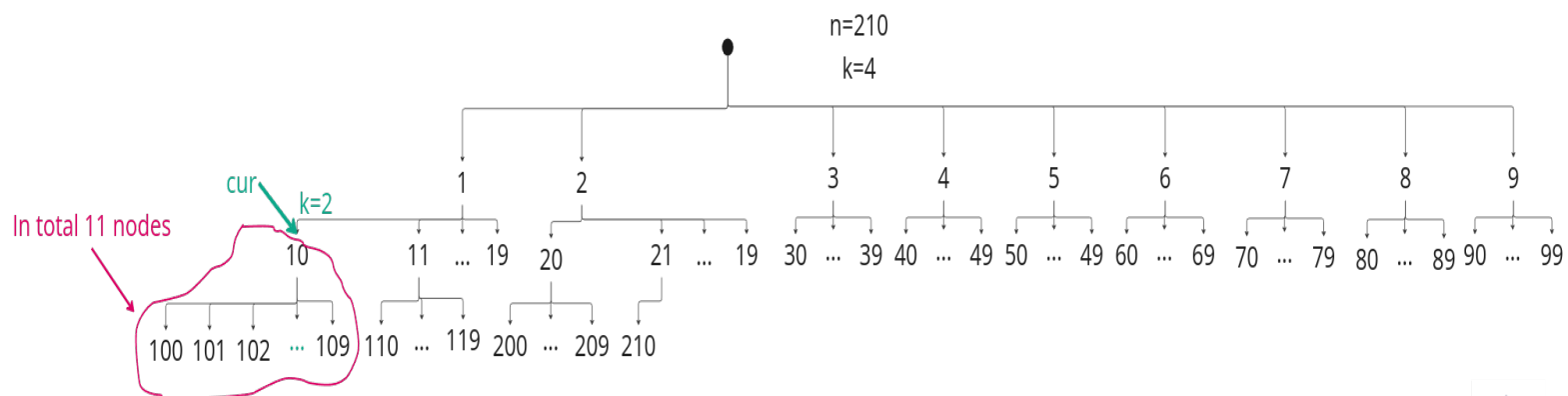
111 > k=4, we are sure that the 4th number is within here

Getting the kth number



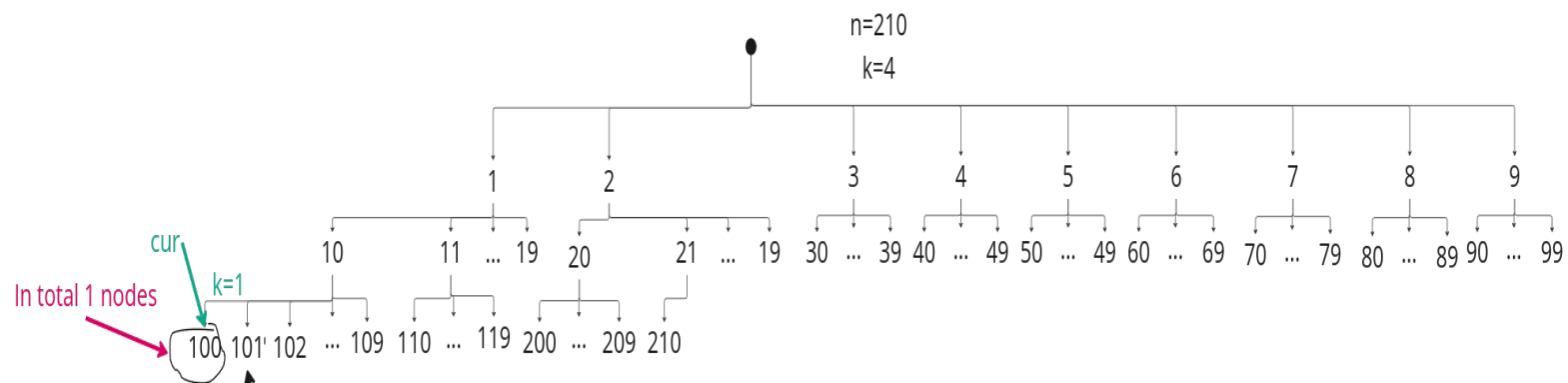
miro

111 > k=4, we are sure that the 4th number is within here



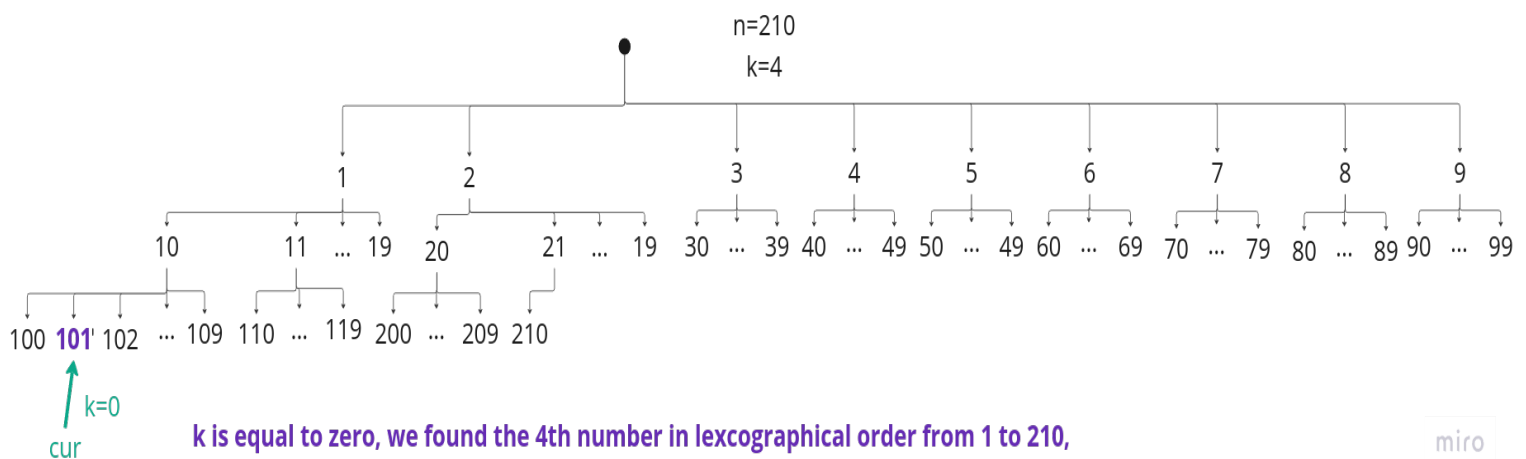
miro

11 nodes > k=2, we are sure that the 4th number is within here



miro

1 node = k=1, we pass to the next node



k is equal to zero, we found the 4th number in lexicographical order from 1 to 210, which is 101

miro