

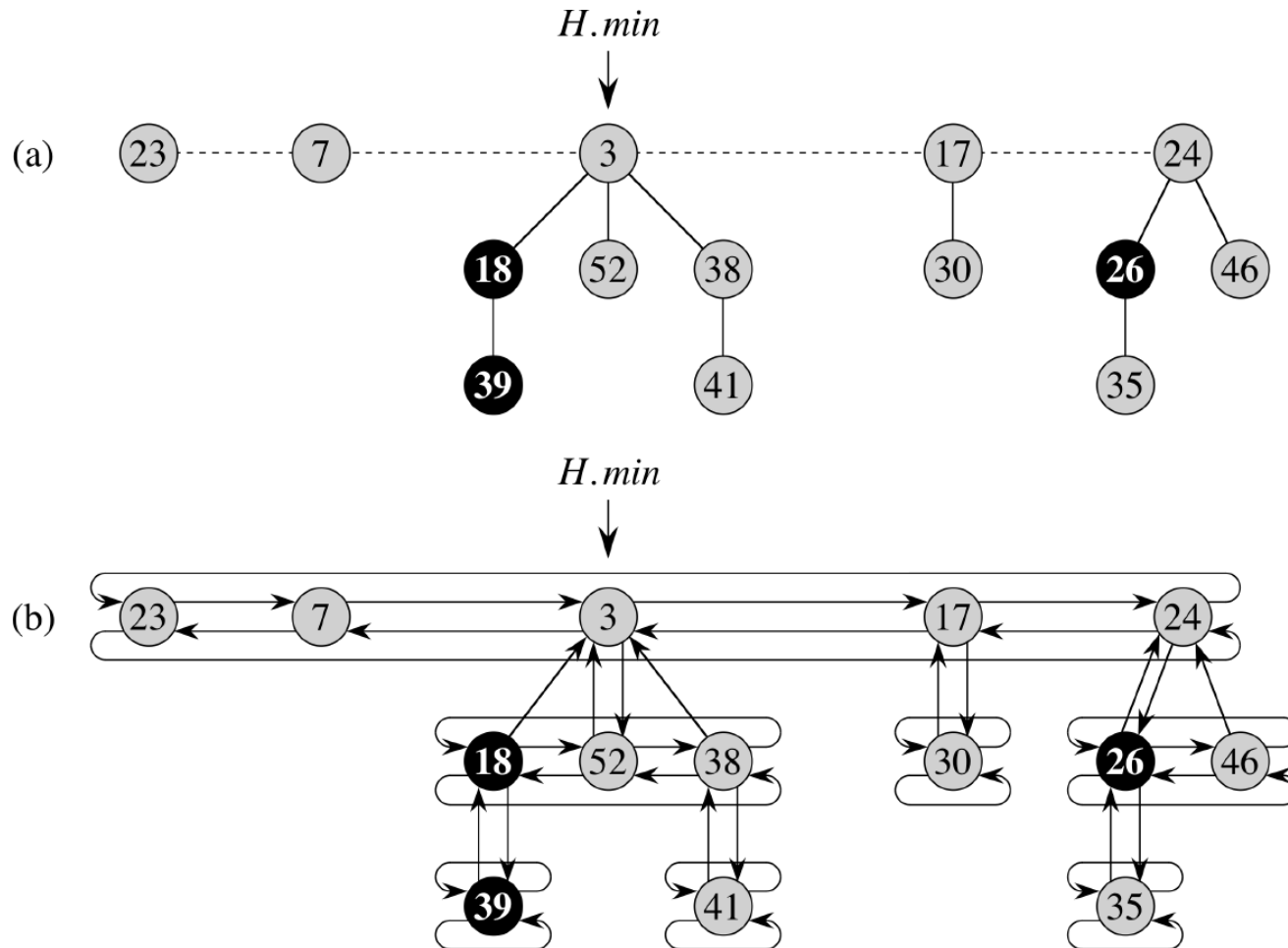
ICS 621 Spring 2012

Fibonacci Heaps

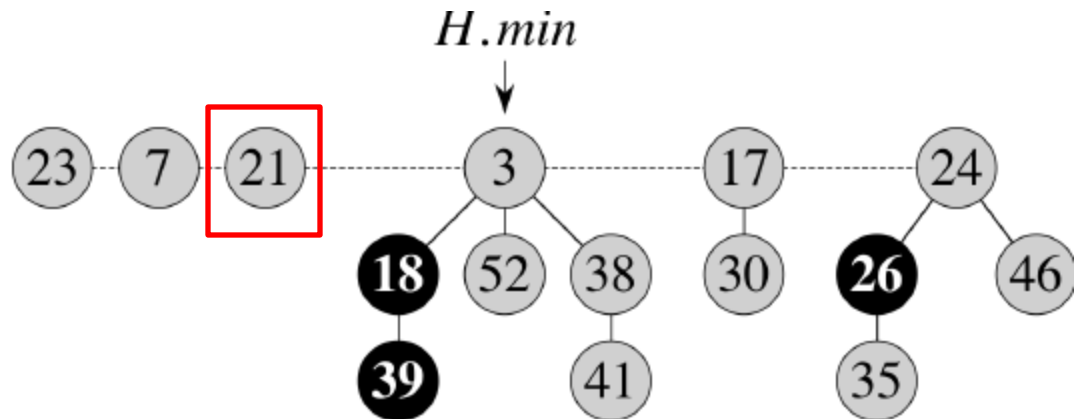
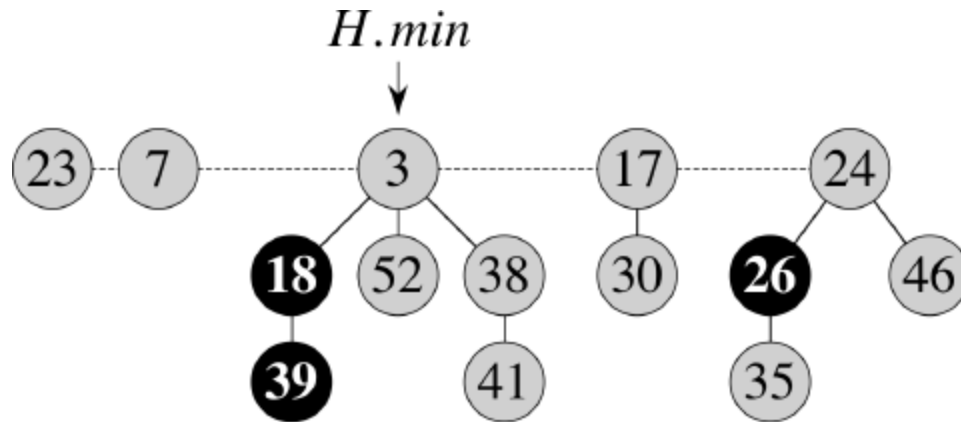
Asst. Prof. Lipyeow Lim

Information and Computer Sciences Department
University of Hawaii at Mānoa

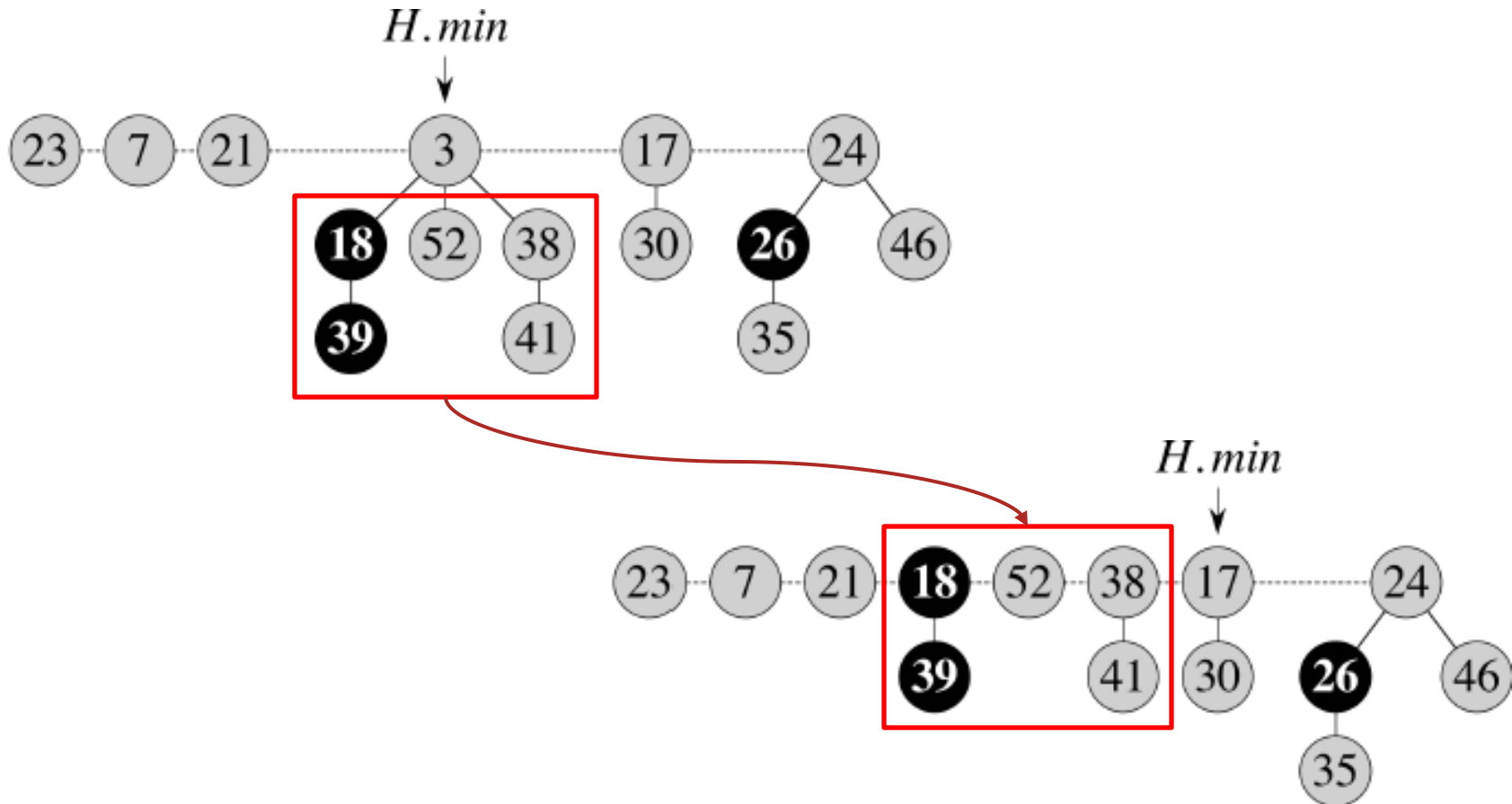
Implementation of Fibonacci Heaps



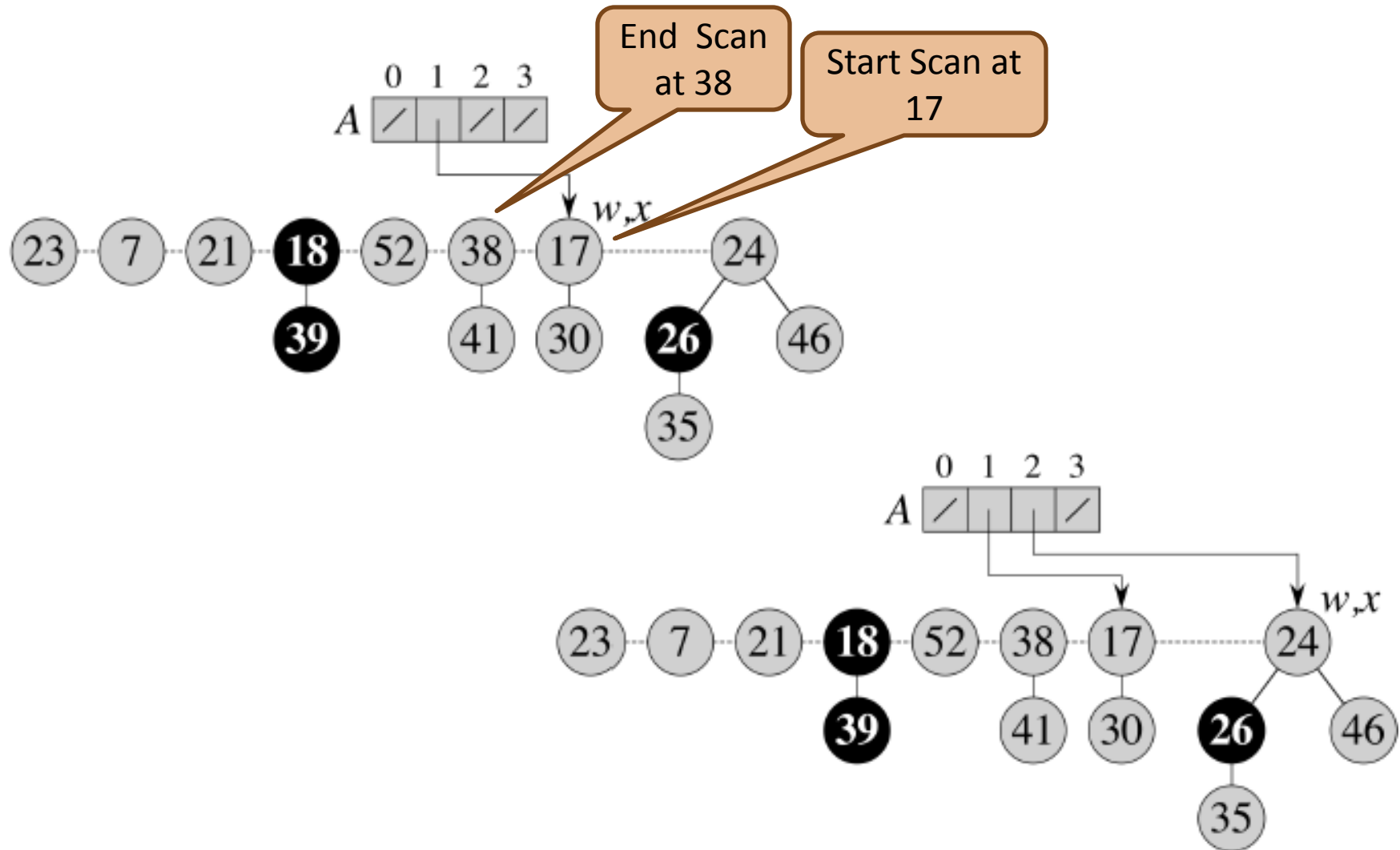
Insert(H, 21)



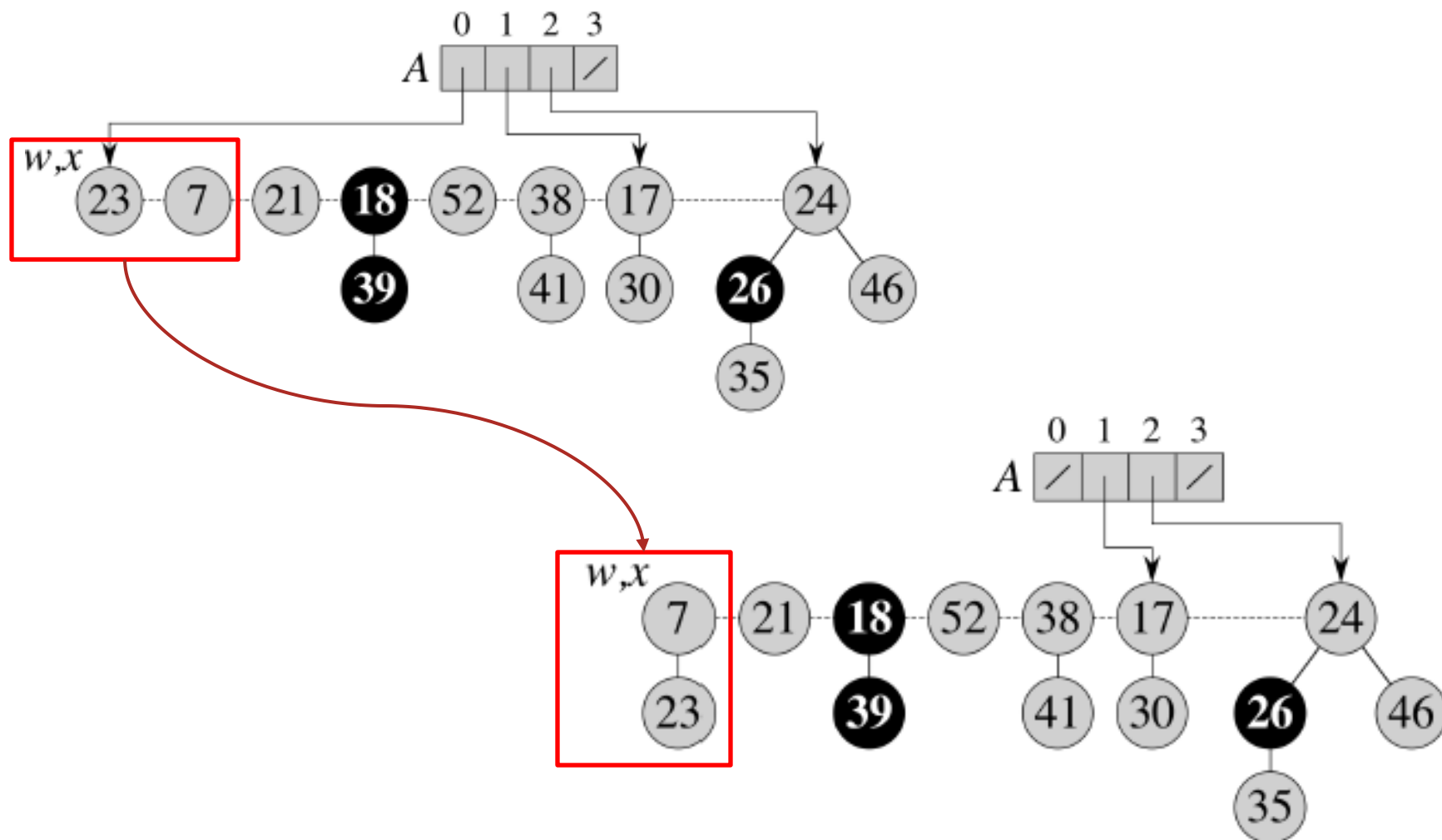
Extract-Min(H)



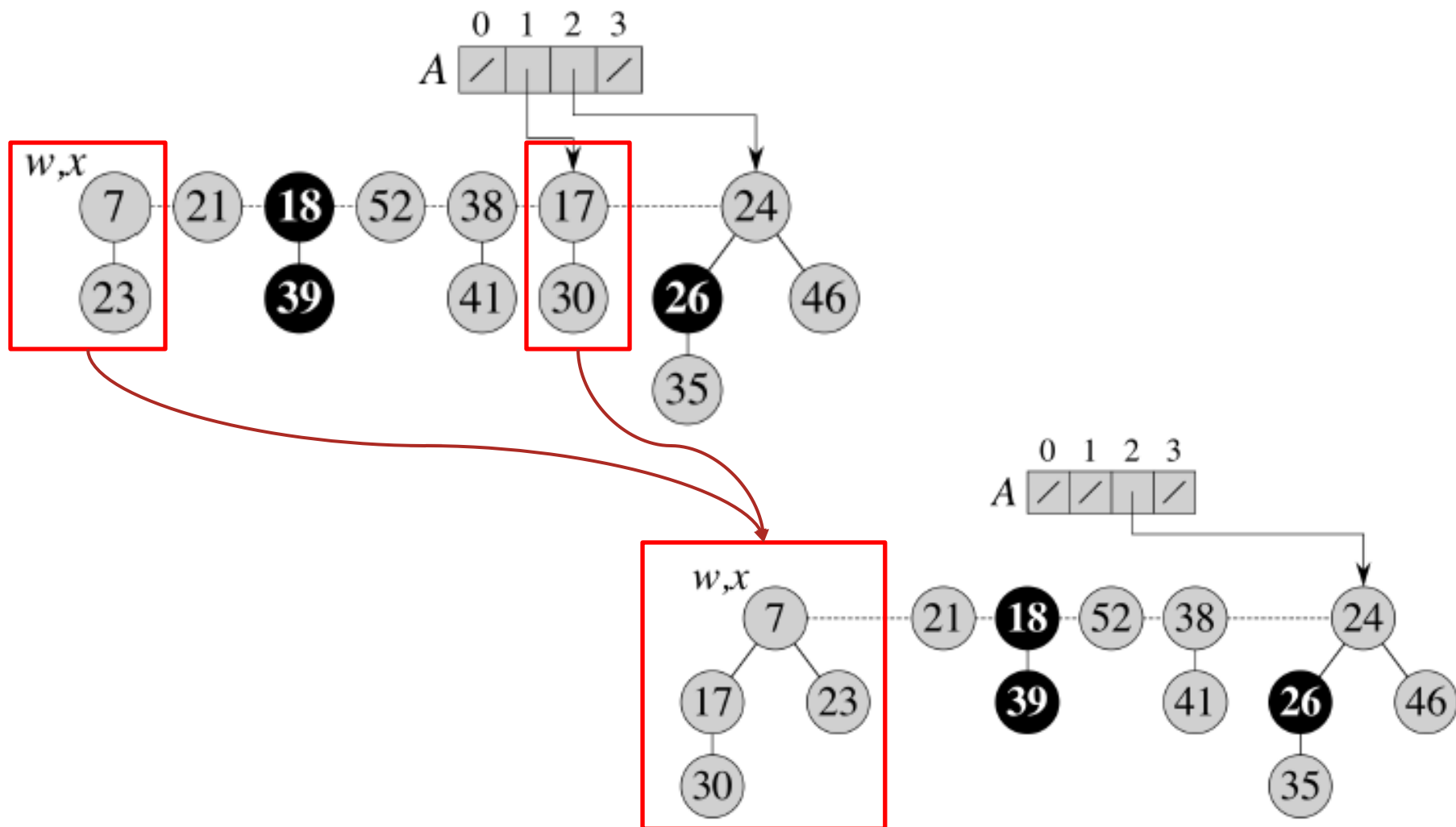
Consolidate Trees with Same Degree



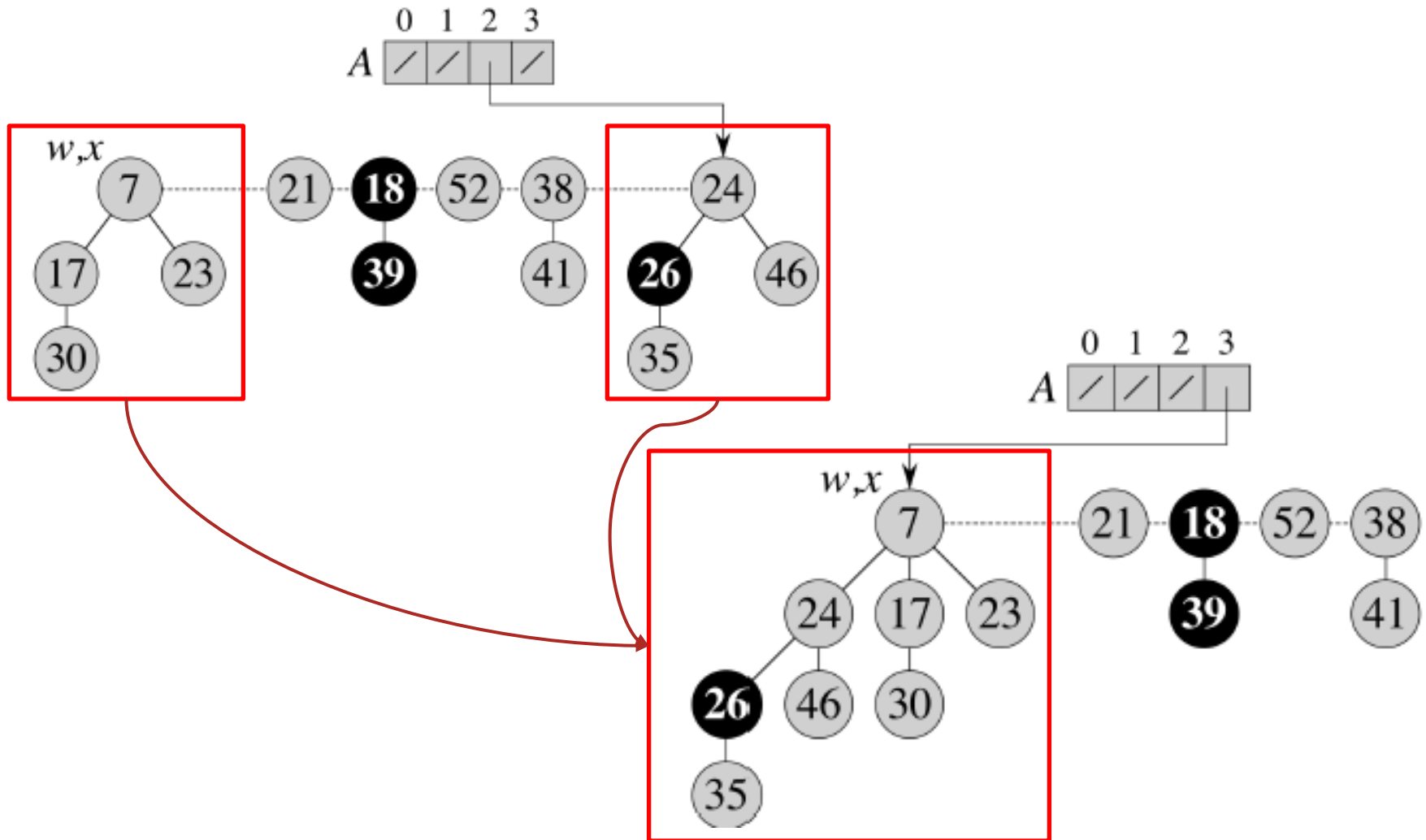
Consolidate Trees (2)



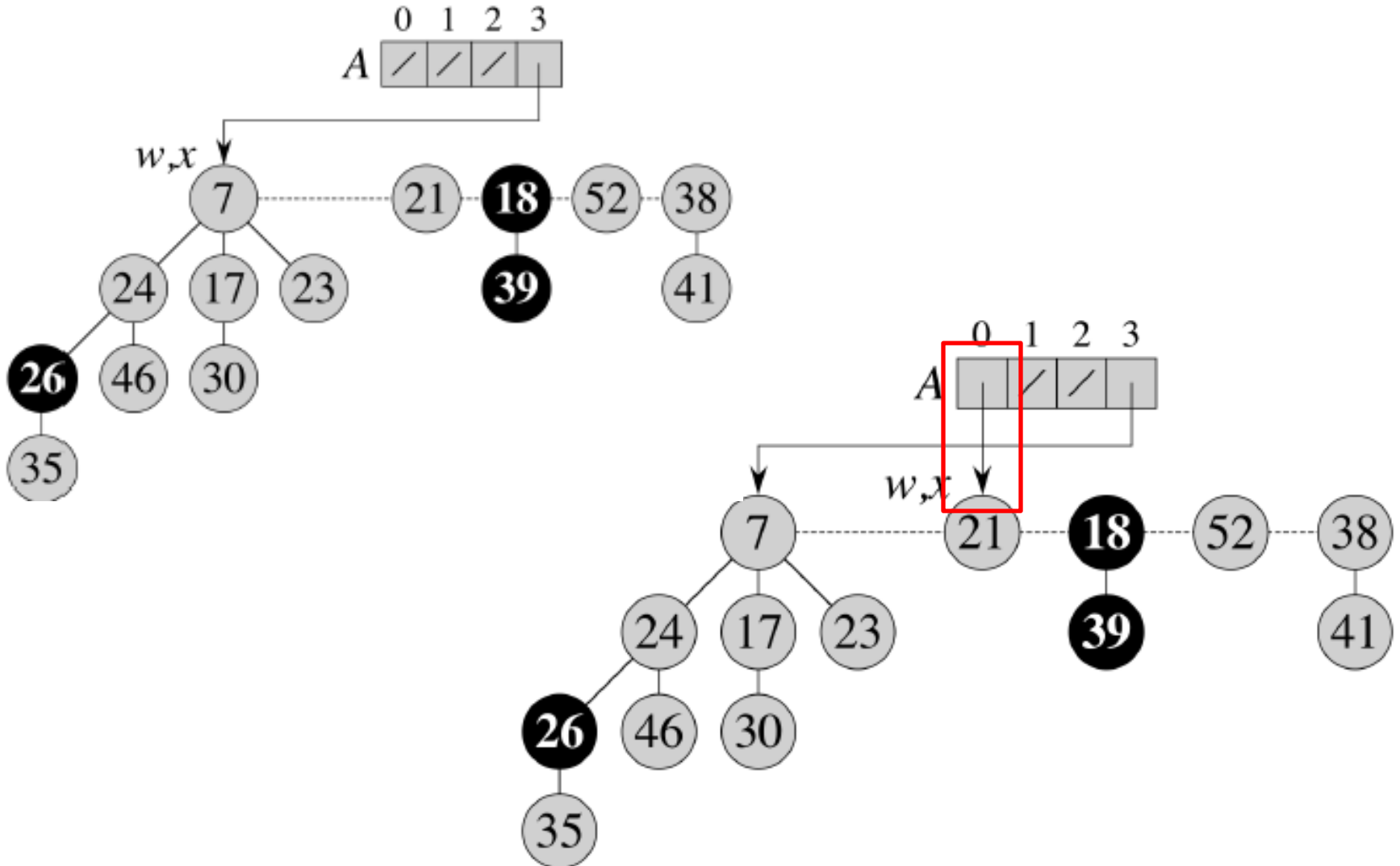
Consolidate Trees (3)



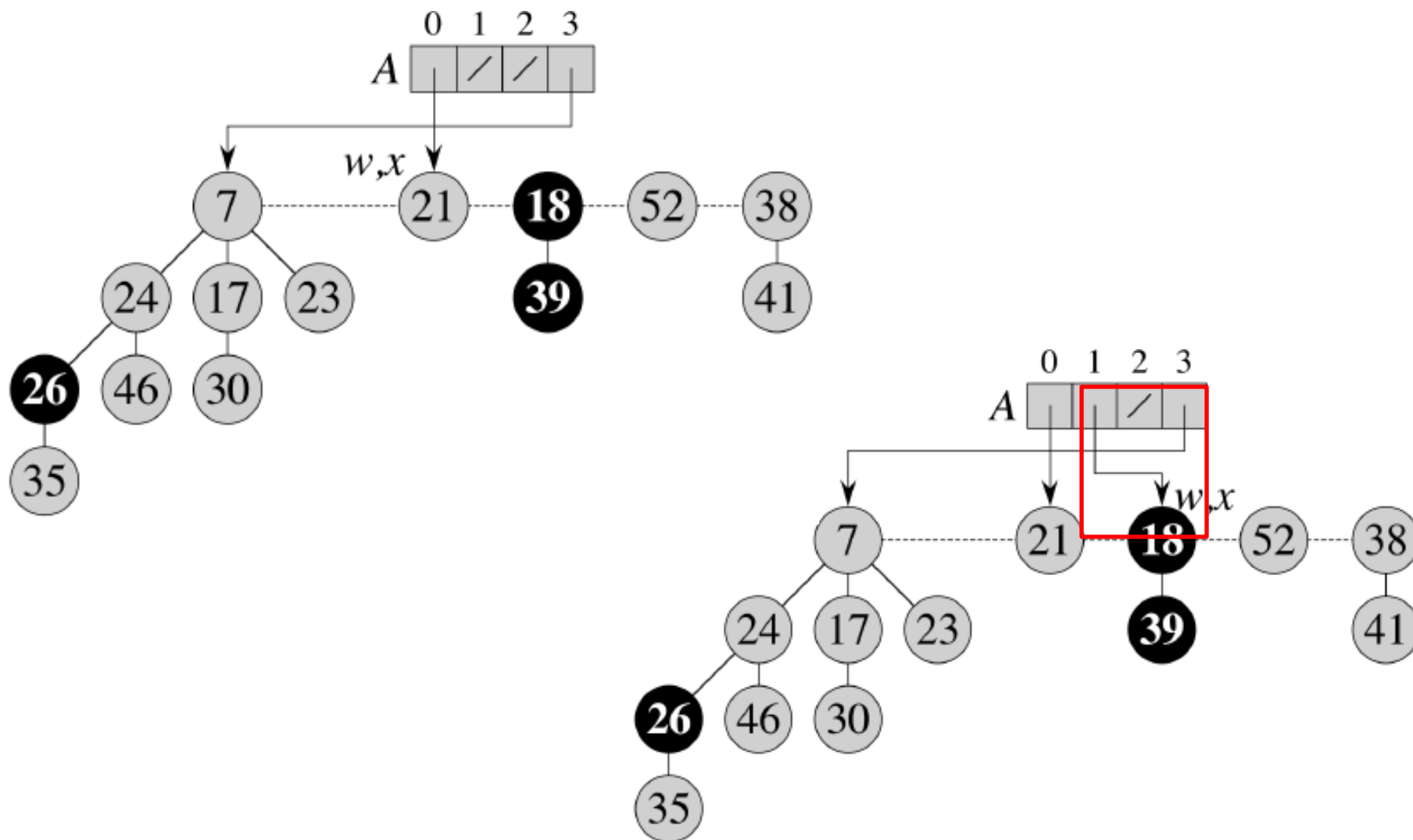
Consolidate Trees (4)



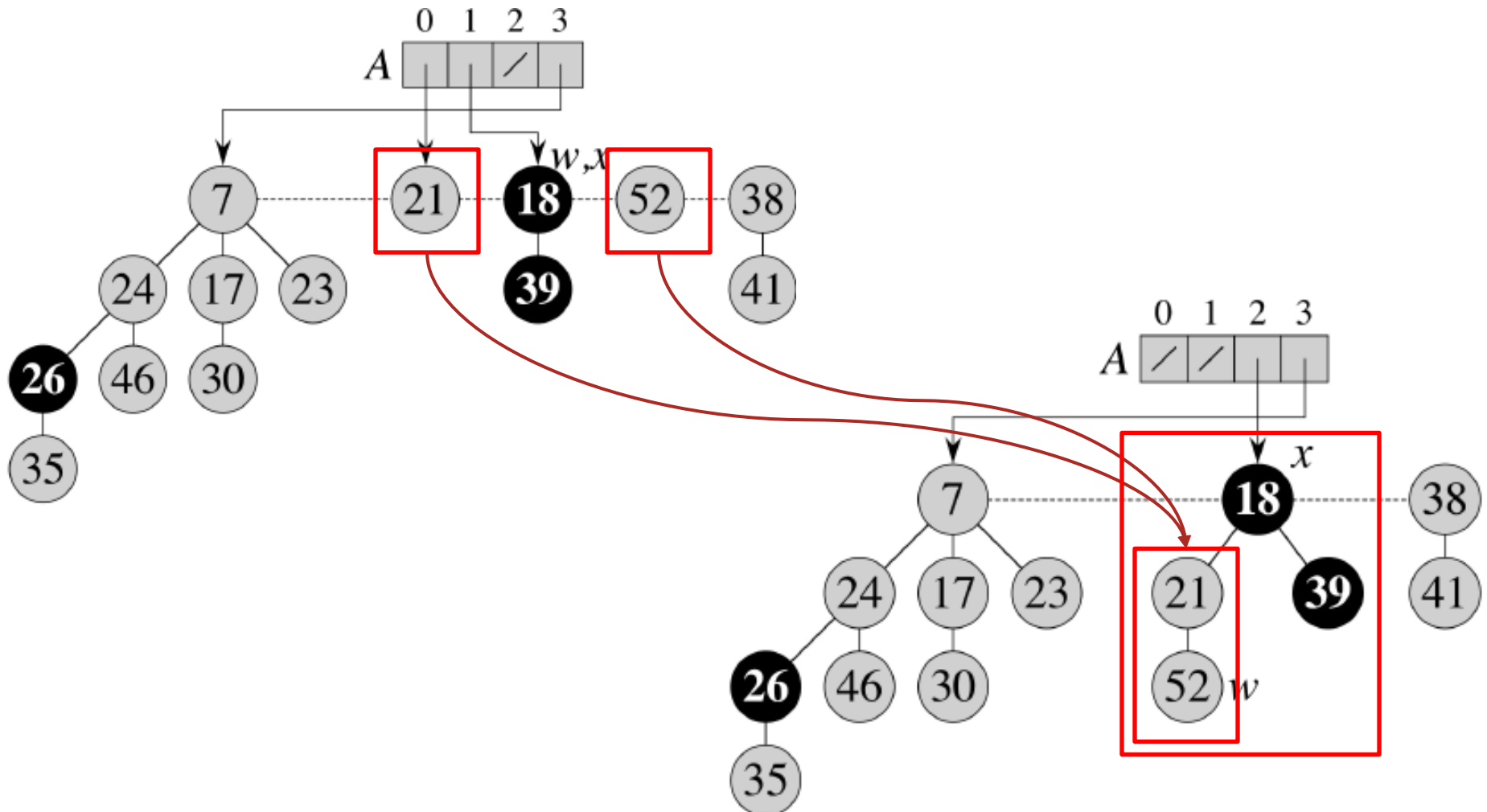
Consolidate Trees (5)



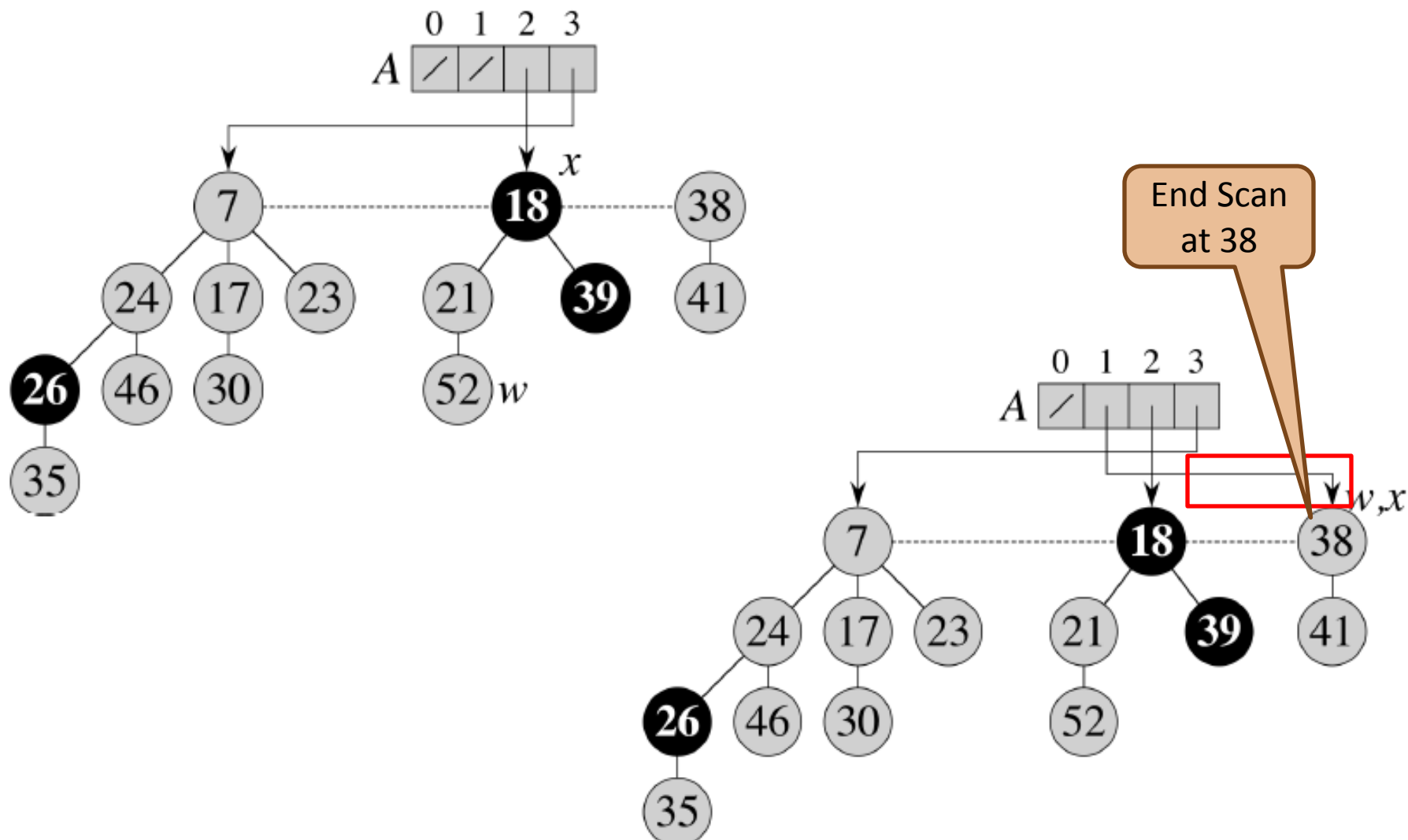
Consolidate Trees (6)



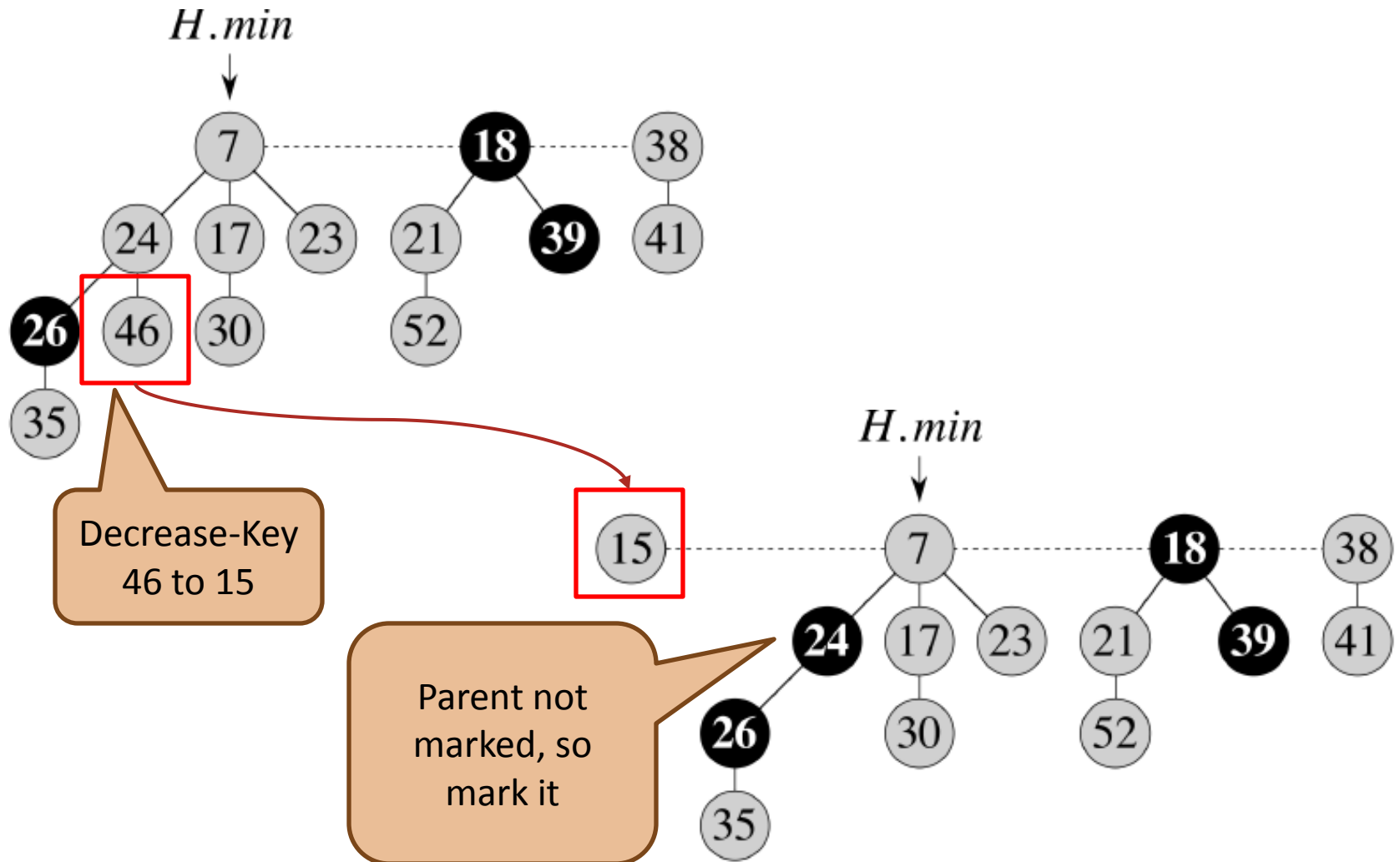
Consolidate Trees (7)



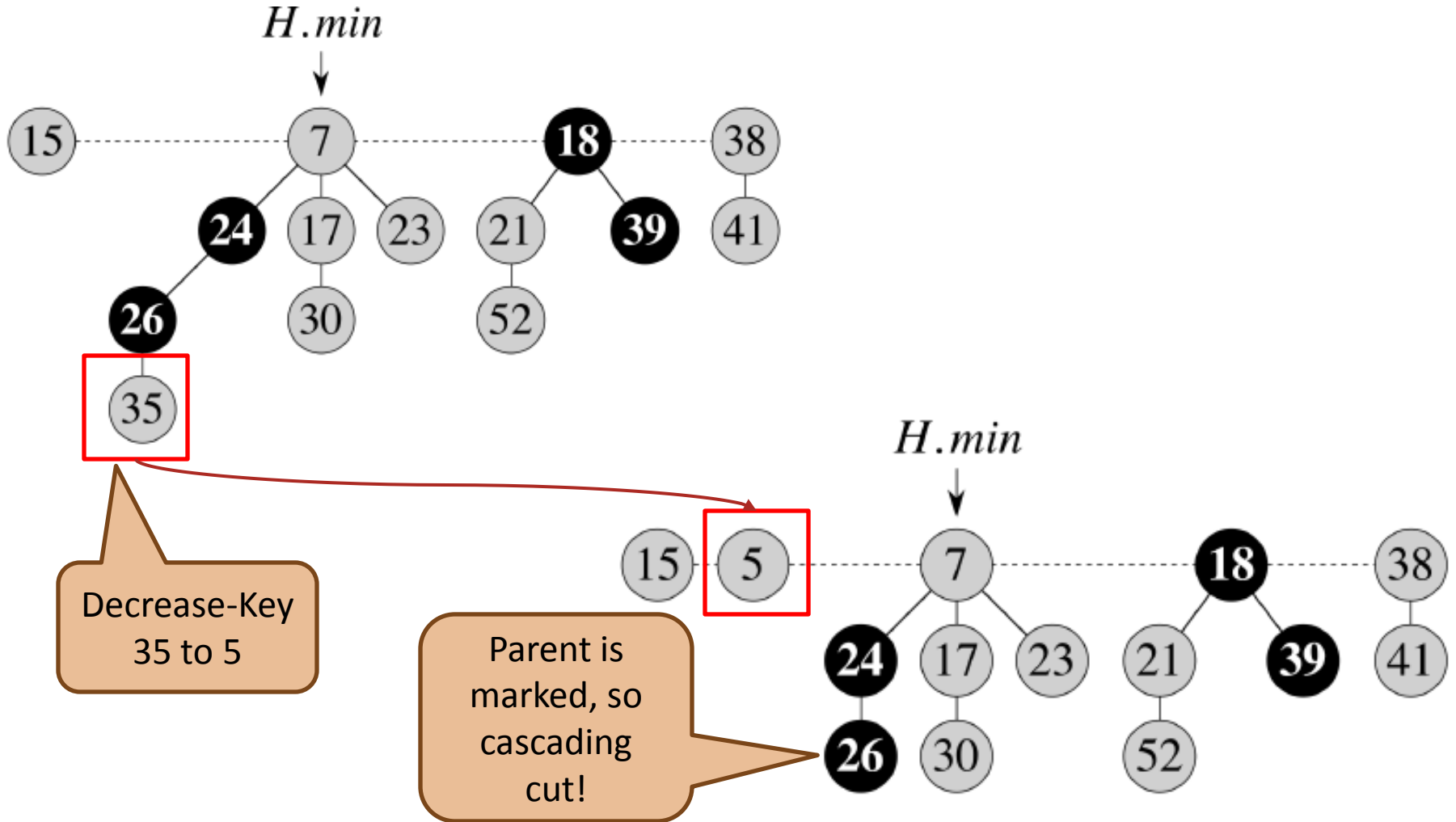
Consolidate Trees (8)



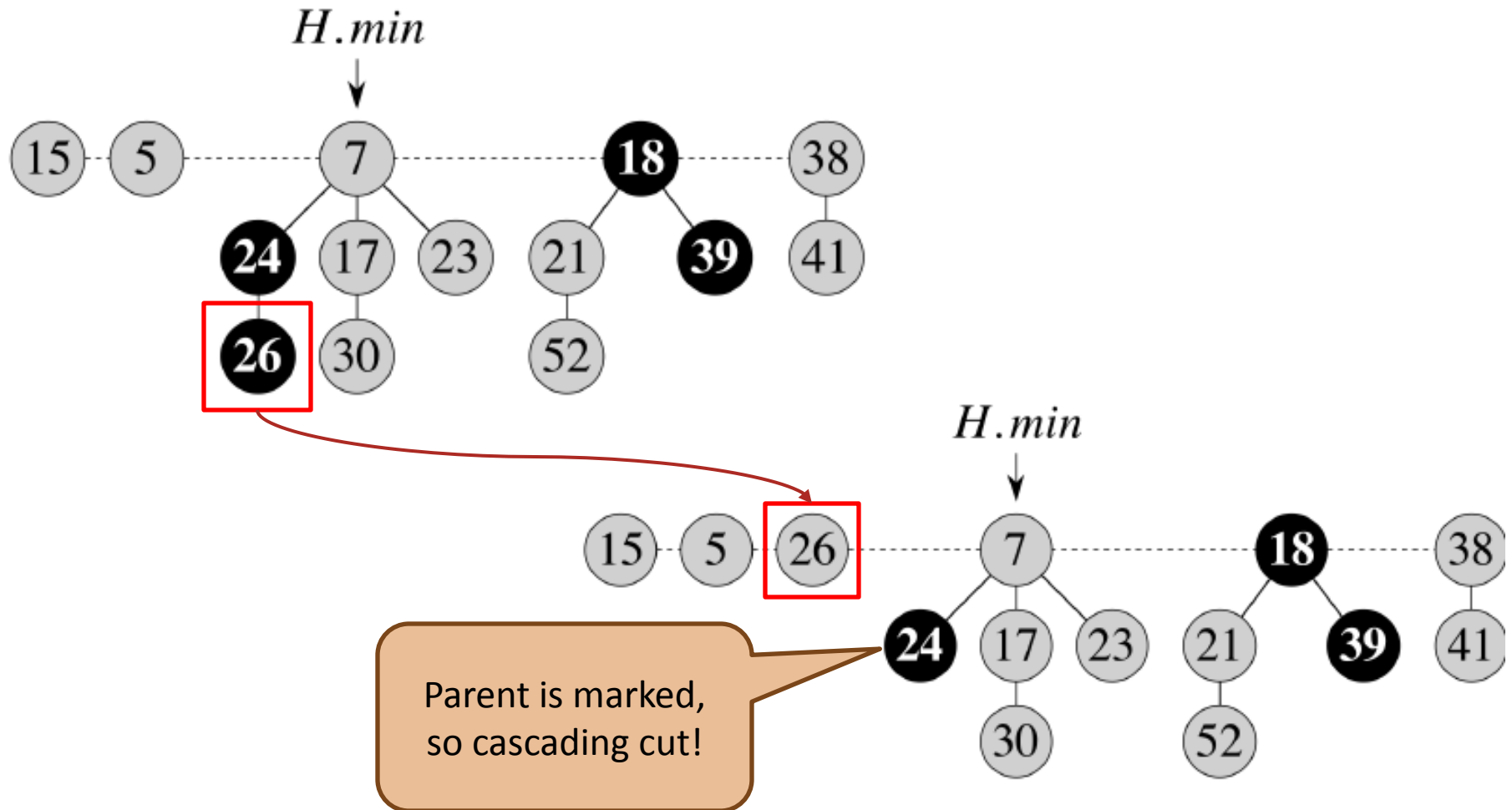
Decrease-Key : 46 to 15



Decrease-Key : 35 to 5



Cascading-Cut (1)



Cascading-Cut (2)

