

## Union or merging two binomial heaps:-

Case 1:- If  $\text{degree}[x] \neq \text{degree}[\text{next } x]$ , then  
move pointer ahead.

Case 2:- If  $\text{degree}[x] = \text{degree}[\text{next } x] = \text{degree}[\text{sibling}(\text{next } x)]$   
then move the pointer ahead.

Case 3:- If  $\text{degree}[x] = \text{degree}[\text{next } x] \neq \text{degree}[\text{sibling}(\text{next } x)]$   
and  $\text{key}[x] < \text{key}[\text{next } x]$ , then remove 'next x'  
from root and attach to 'x'.

Case 4:- If  $\text{degree}[x] = \text{degree}[\text{next } x] \neq \text{degree}[\text{sibling}(\text{next } x)]$   
and  $\text{key}[x] > \text{key}[\text{next } x]$ , then remove 'x'  
from root and attach to 'next x'.

Dt.  
01/03/24

79, 59, 48, 52, 54, 73, 19, 38, 56, 3, 37, 45, 55,  
65003, 65007.

