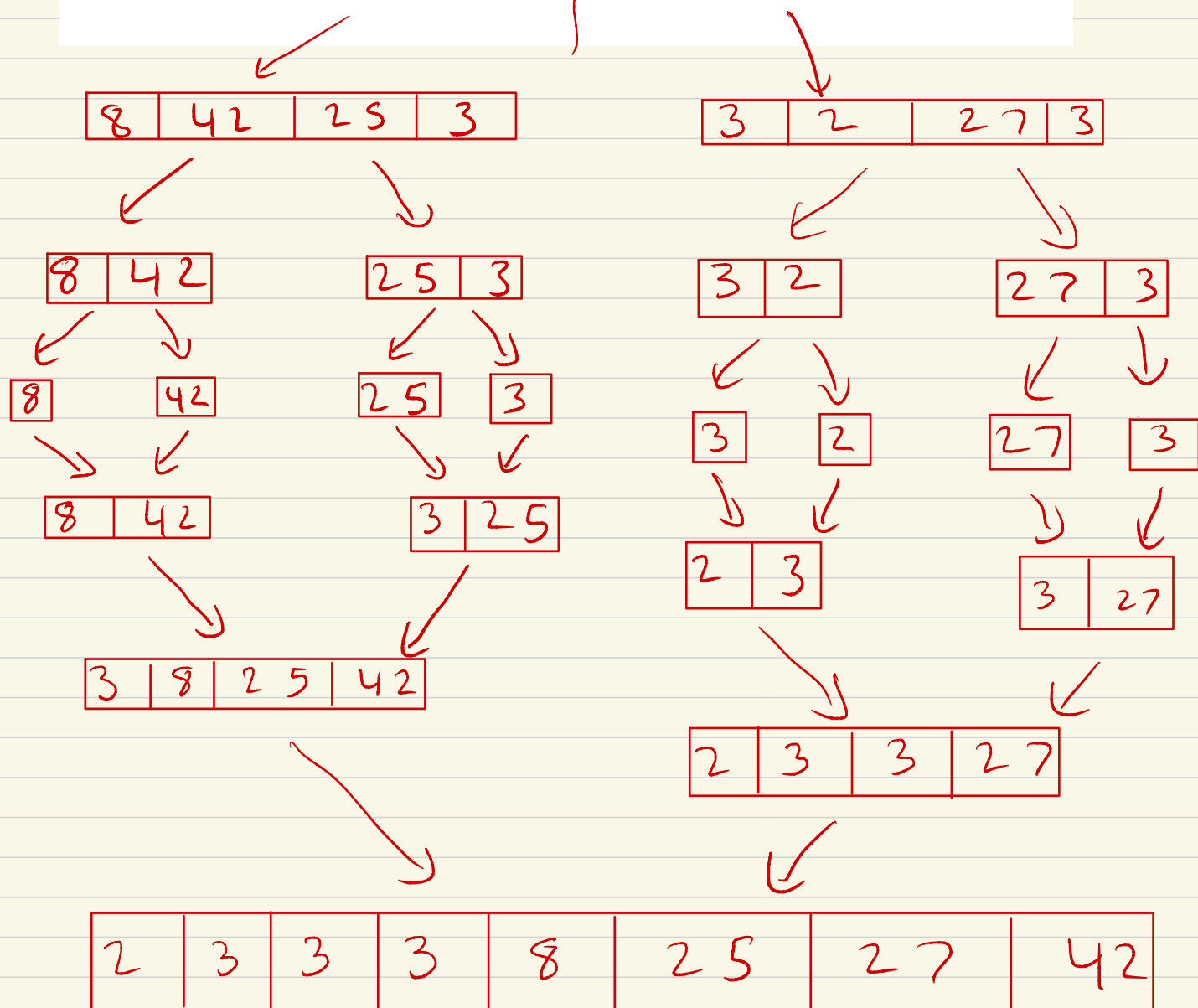


3)

1	2	3	4	5	6	7	8
8	42	25	3	3	2	27	3



The initial array is divided into smaller sub-arrays:

[8 42 25 3] [3 2 27 3]

These are further divided into [8 42] then [8] [42], [25 3] then [25] [3] and

$[3 \ 2]$ then $[3]$ $[2]$ and
 $[27 \ 3]$ then $[27]$ $[3]$.

These sub arrays are
then sorted individually
and merged. After merge
they become $[3 \ 8 \ 25 \ 42]$
and $[2 \ 3 \ 3 \ 27]$. The two
sorted sub arrays are
then merged this gives
us final sorted array
 $[2 \ 3 \ 3 \ 3 \ 8 \ 25 \ 27 \ 42]$.