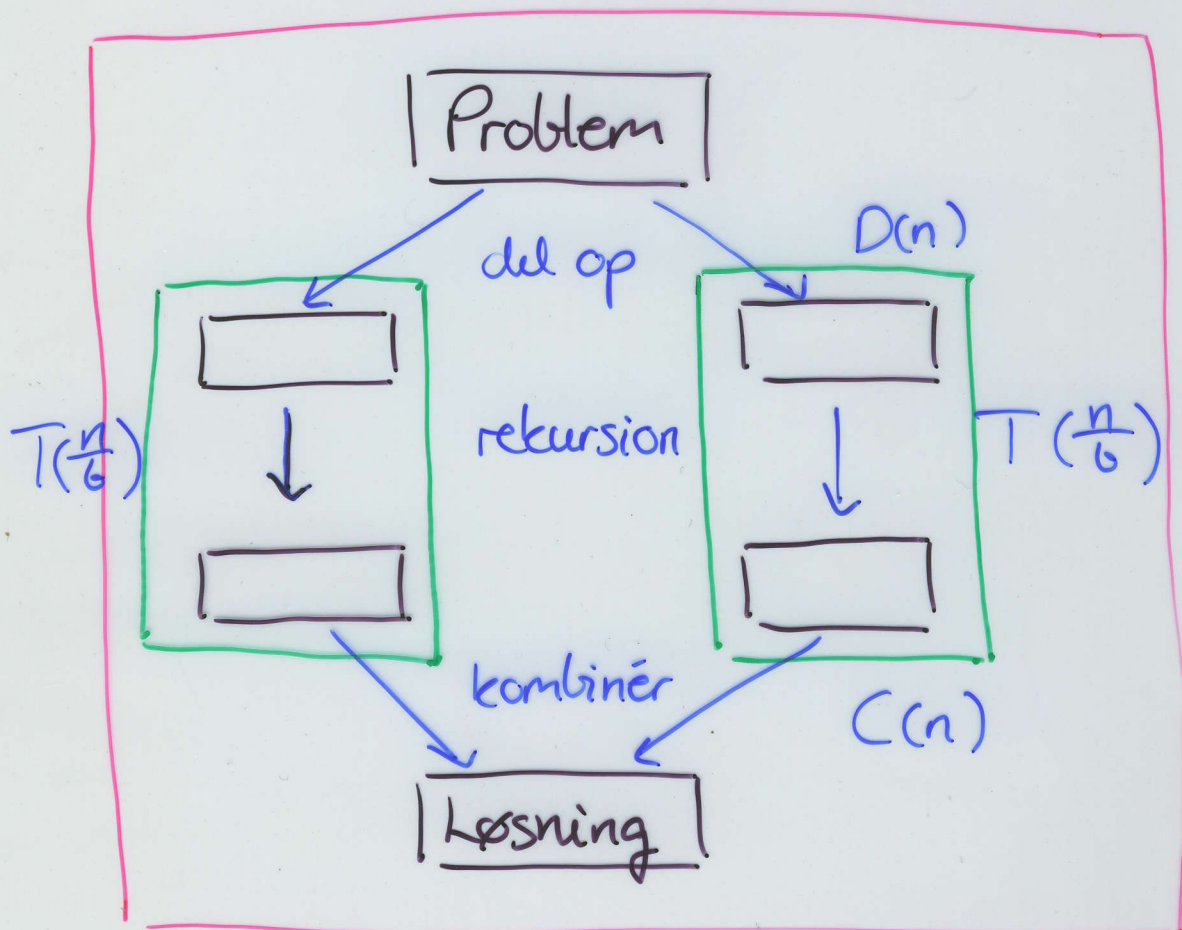


DEL & HERSK

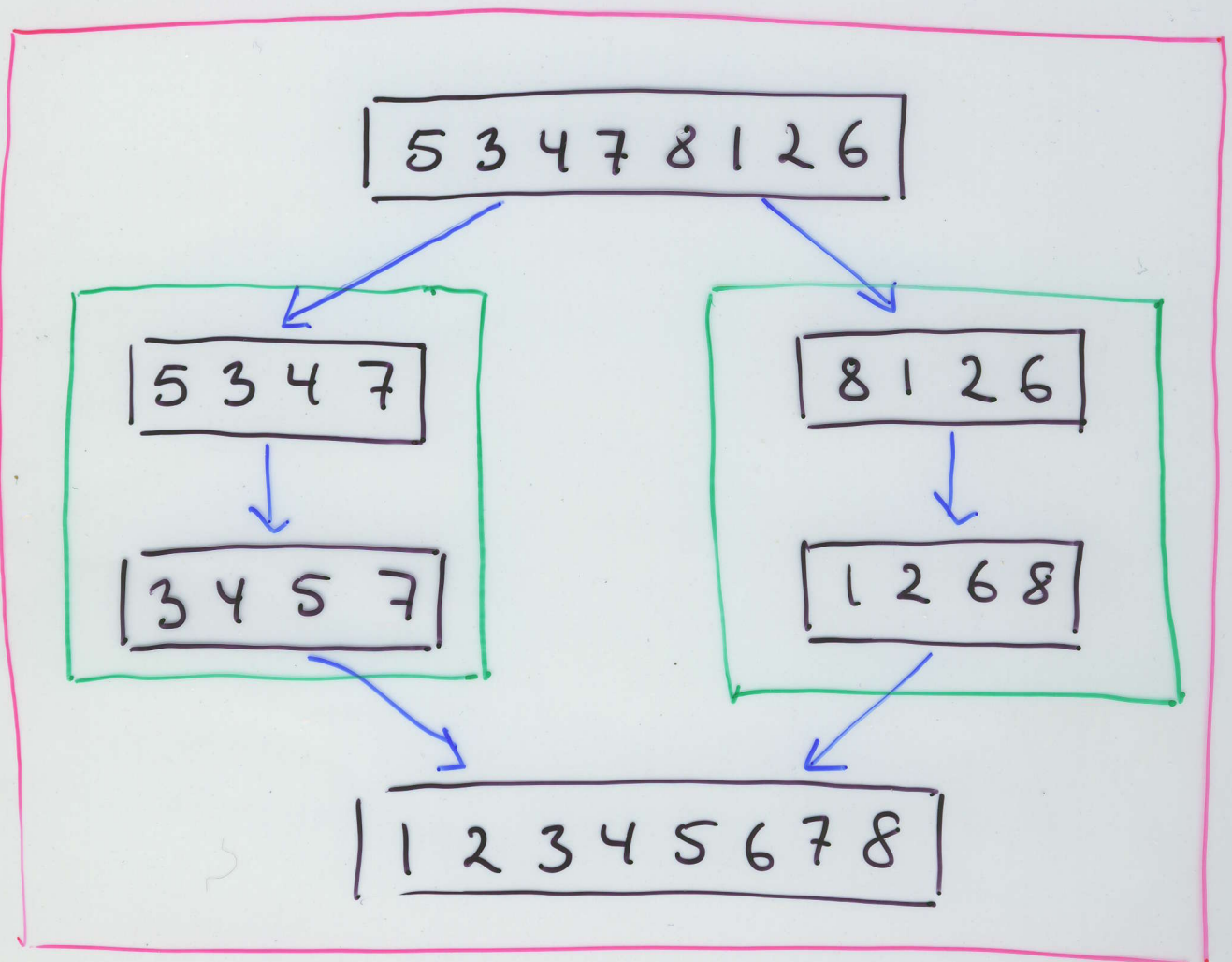


 : kopi af , eller
løs direkte, hvis $n \leq c$

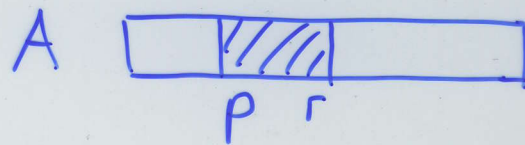
Samlet tid:

$$T(n) = \begin{cases} \Theta(1), & \text{hvis } n \leq c \\ D(n) + aT(\frac{n}{b}) + C(n), & \text{ellers} \end{cases}$$

MERGE - SORT



MERGE-SORT (A, p, r)



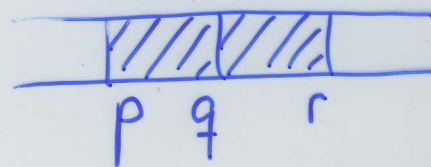
if $p < r$

$q \leftarrow \lfloor \frac{p+r}{2} \rfloor$

MERGE-SORT (A, p, q)

MERGE-SORT ($A, q+1, r$)

MERGE (A, p, q, r)



MERGE-SORT ($A, 1, 8$)

if $1 < 8$

$$q \leftarrow \lfloor \frac{1+8}{2} \rfloor = 4$$

M.S. ($A, 1, 4$)

M.S. ($A, 5, 8$)

MERGE ($A, 1, 4, 8$)

M.S. ($A, 1, 4$)

if $1 < 4$

$$q \leftarrow 2$$

M.S. ($A, 1, 2$)

M.S. ($A, 3, 4$)

MERGE ($A, 1, 2, 4$)

M.S. ($A, 1, 2$)

if $1 < 2$

$$q \leftarrow 1$$

M.S. ($A, 1, 1$)

M.S. ($A, 2, 2$)

MERGE ($A, 1, 1, 2$)

M.S. ($A, 3, 4$)

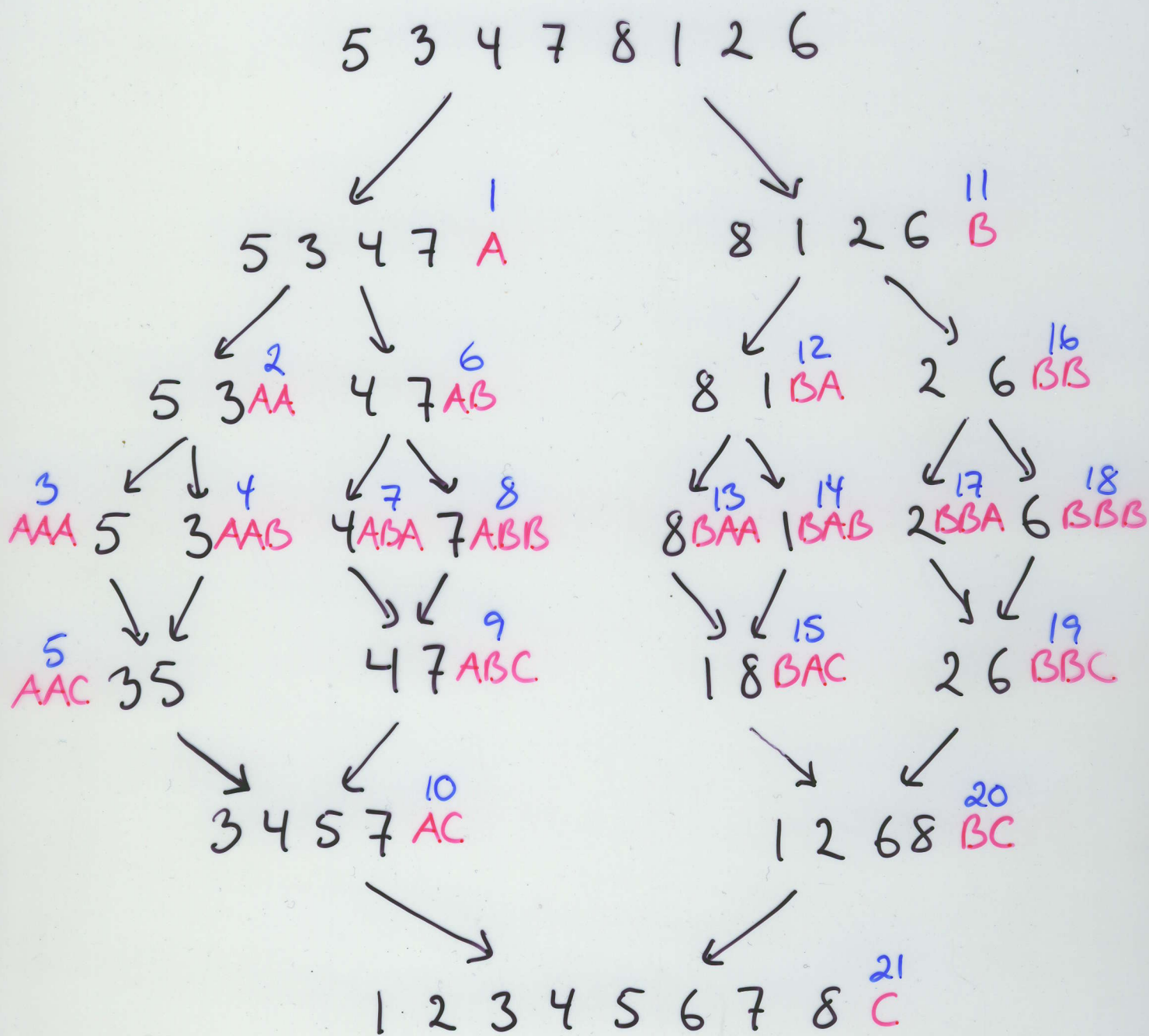
if $3 < 4$

$$q \leftarrow 3$$

M.S. ($A, 3, 3$)

M.S. ($A, 4, 4$)

MERGE ($A, 3, 3, 4$)



A: MERGE-SORT (A, p, q)

B: MERGE-SORT ($A, q+1, r$)

C: MERGE (A, p, q, r)