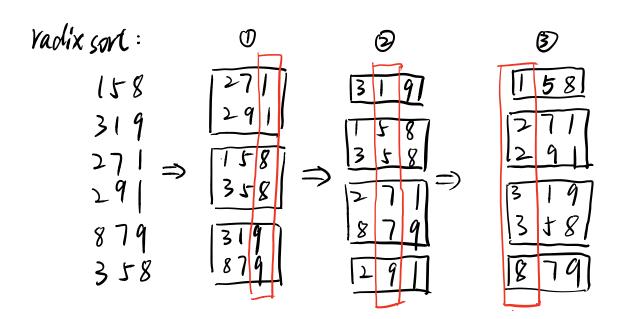
EX1. (iv)

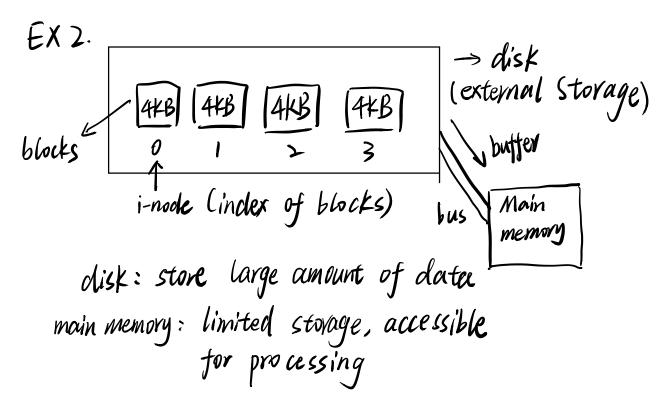
quicksort:

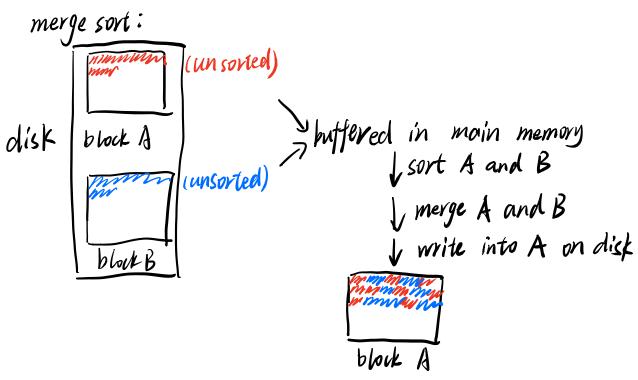
pivot | partition & pivot

quicksort | pivot |

quicksort | quicksort | precursion







(6)
$$\begin{vmatrix} A \\ B \\ C \end{vmatrix} = \begin{vmatrix} A \\ B \\ A \end{vmatrix} = \begin{vmatrix} C \\ B \\ A \end{vmatrix}$$

Stack | Stack 2 Stack 3

Stack | Stack 2 Stack 3

(iv)
$$\begin{array}{c|c}
A & \Rightarrow head \\
B & \hline
C & B & A
\end{array}$$

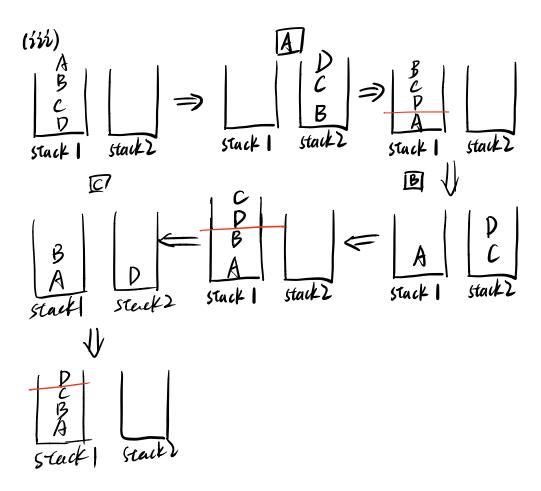
$$\begin{array}{c|c}
A & \Rightarrow head \\
\hline
C & B & A
\end{array}$$

$$\begin{array}{c|c}
G & \text{queue}
\end{array}$$

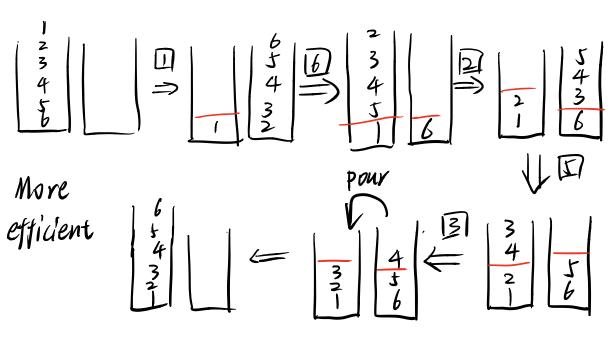
$$\begin{array}{c|c}
C & B & A
\end{array}$$

$$\begin{array}{c|c}
G & \text{queue}
\end{array}$$

$$\begin{array}{c|c}
C & \text{tail} & \Rightarrow head \\
\hline
C & B & A
\end{array}$$



Can also adjust two stacks at the same time.



EX. 4.
$$q \cot - ref$$
 (in-place swap)

pirot

 $\frac{538749261}{1}$
 $\Rightarrow 138749265$
 $\Rightarrow 132479865$
 $\Rightarrow 132479865$
 $\Rightarrow 132749865$
 $\Rightarrow 132749865$
 $\Rightarrow 132749865$
 $\Rightarrow 132749865$
 $\Rightarrow 132749865$