

Transpose of a  $n \times n$  matrix

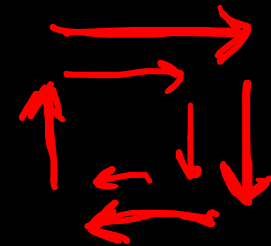
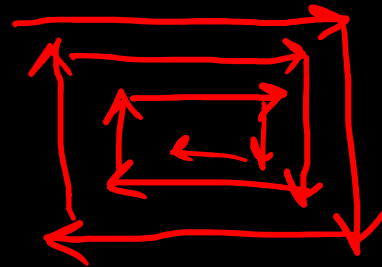
$$A = \begin{bmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \\ 7 & 8 & 9 \end{bmatrix} \quad B = \begin{bmatrix} 1 & 4 & 7 \\ 2 & 5 & 8 \\ 3 & 6 & 9 \end{bmatrix}$$

$$A(i, j) \quad , \quad B[i][j] = A[j][i]$$

# Spiral Order Traversal

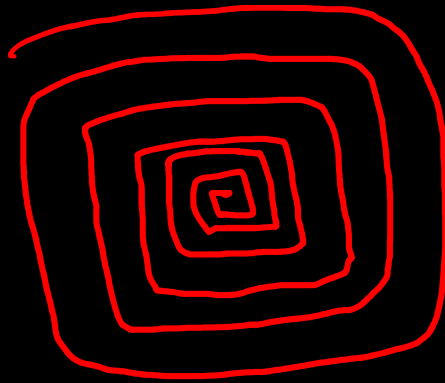
1	2	3	4
5	6	7	8
9	10	11	12

swap  
int temp

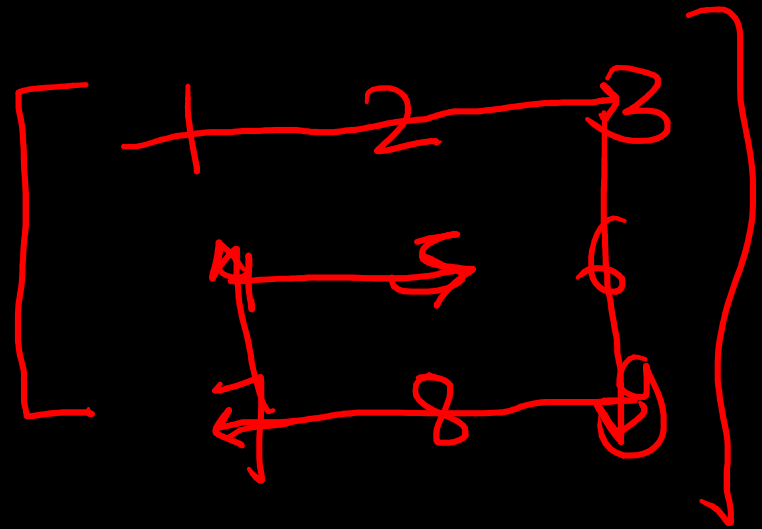
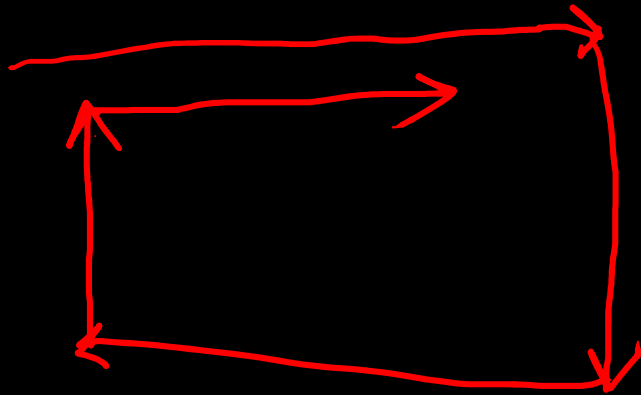
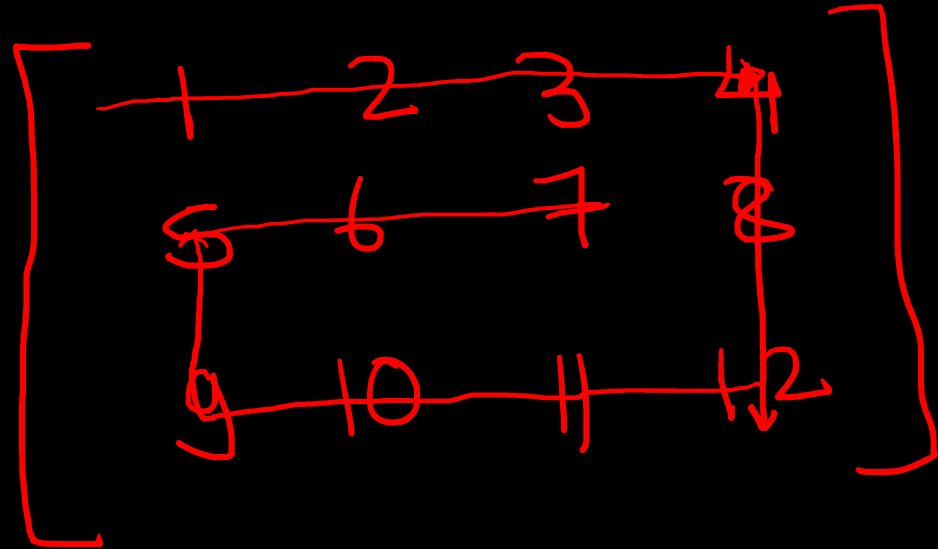


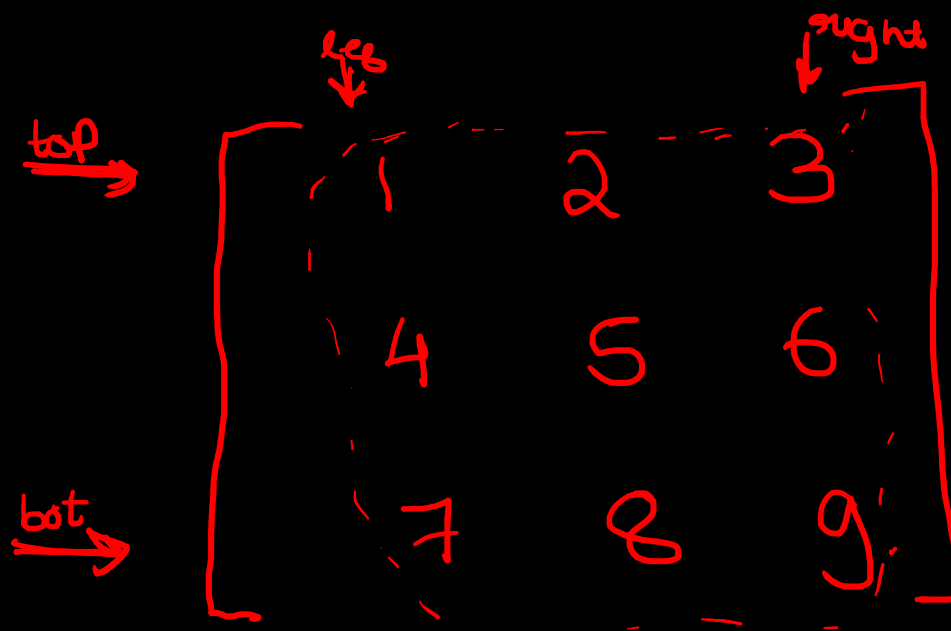
L.C → Price  
sop Sort  
compara

Misc  
sorting

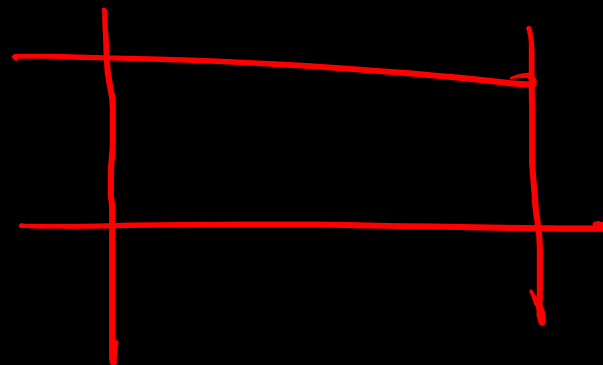


Medium



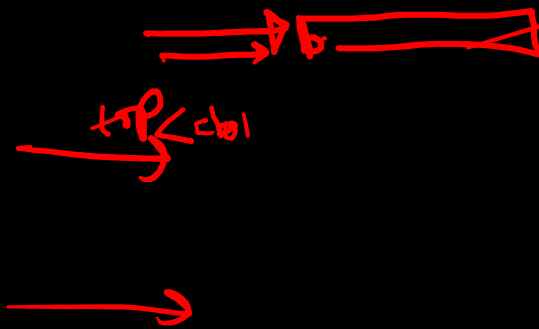
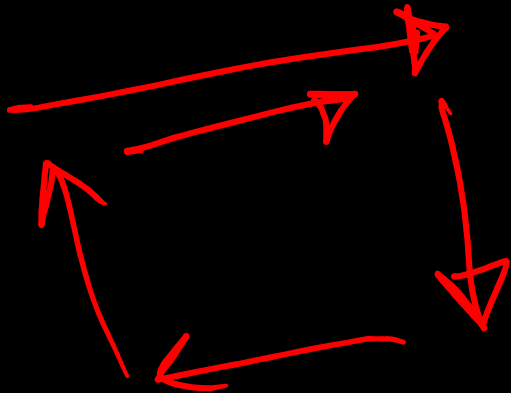


[top, bottom]  
[left, right]





$l = 0$   
 $r = 0$   
 $l < r$



$l = 0$   
 $r = 0$   
 $l < r$

$l < r$   
 $l > r$