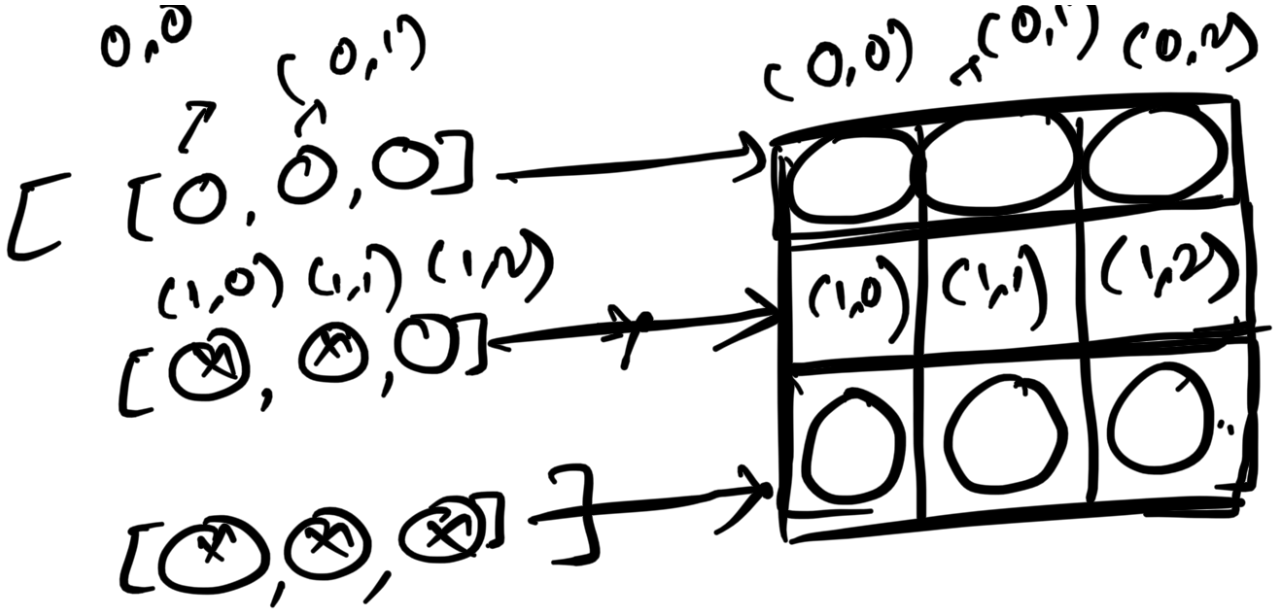
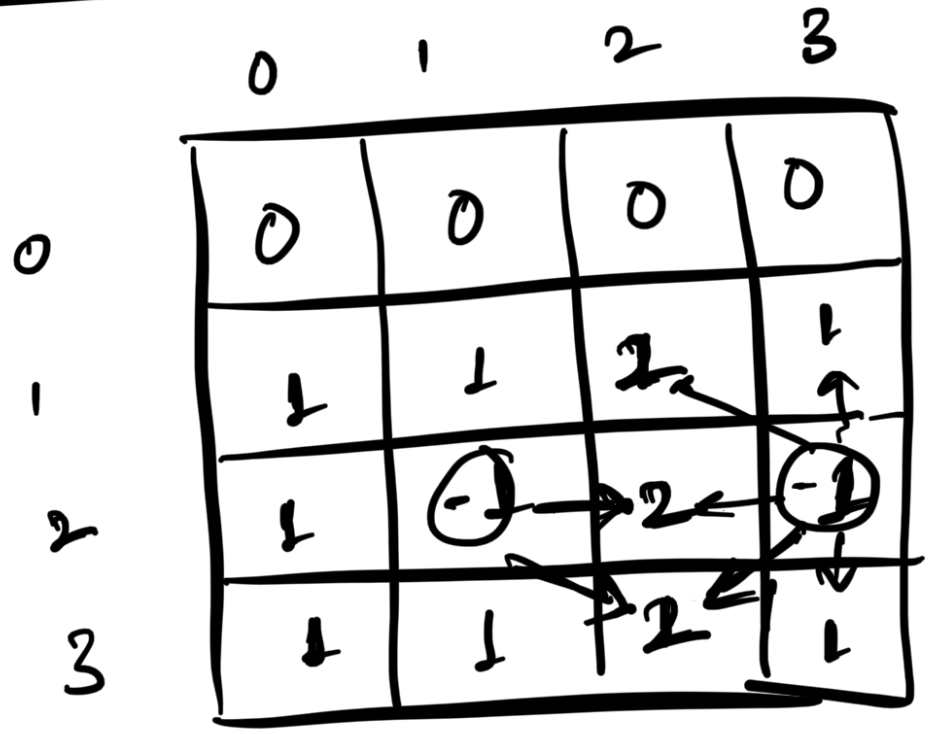
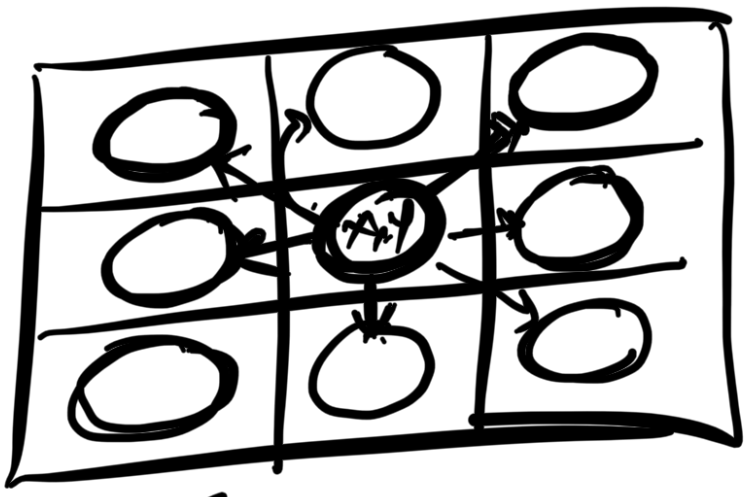




If I consider the bombs array.

(2,3) (2,1)

(1,1) (1,2)



2nd {

x = [-1,]

y = [0,]

0

(row)(col)

row + x(index)

col + y(index).

↳ new surrounding cell.

(x, y) → (x-1, y).

↳ (x+1, y).

↳ (x, y+1).

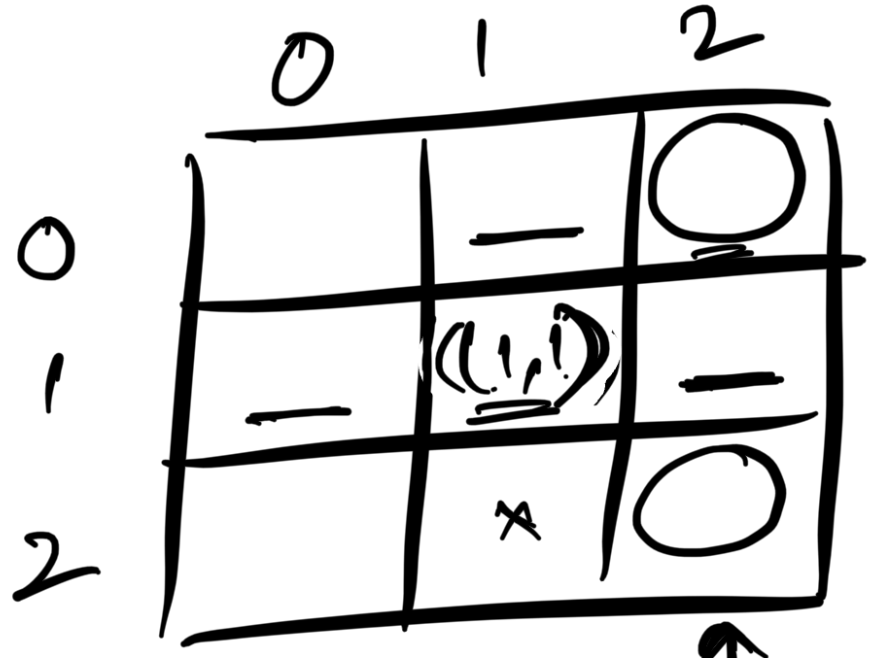
↳ (x, y-1).

↳ (x-1, y+1).

↳ (x-1, y-1).

(x+1, y+1).

(x+1, y-1).



(1,2)

(x, y+1)

(x-1, y)

(2,2)

(0,2)

(1,1)

x → 2 (y+1)

(x+1, y)

(1,1) → (2,2)

(x+1, y+1)

x = 1, y = 1,

x = 2, y = 2 ⇒ x+1, y+1

8 different cells

(x-1, y) (x+1, y) (x, y-1) (x, y+1)

(x-1, y+1) (x+1, y+1) (x-1, y-1), (x+1, y-1)

x = [-1, +1, 0, 0, -1, 1, -1, 1]

y = [0, 0, -1, 1, 1, 1, -1, -1]

index = 0, row, col

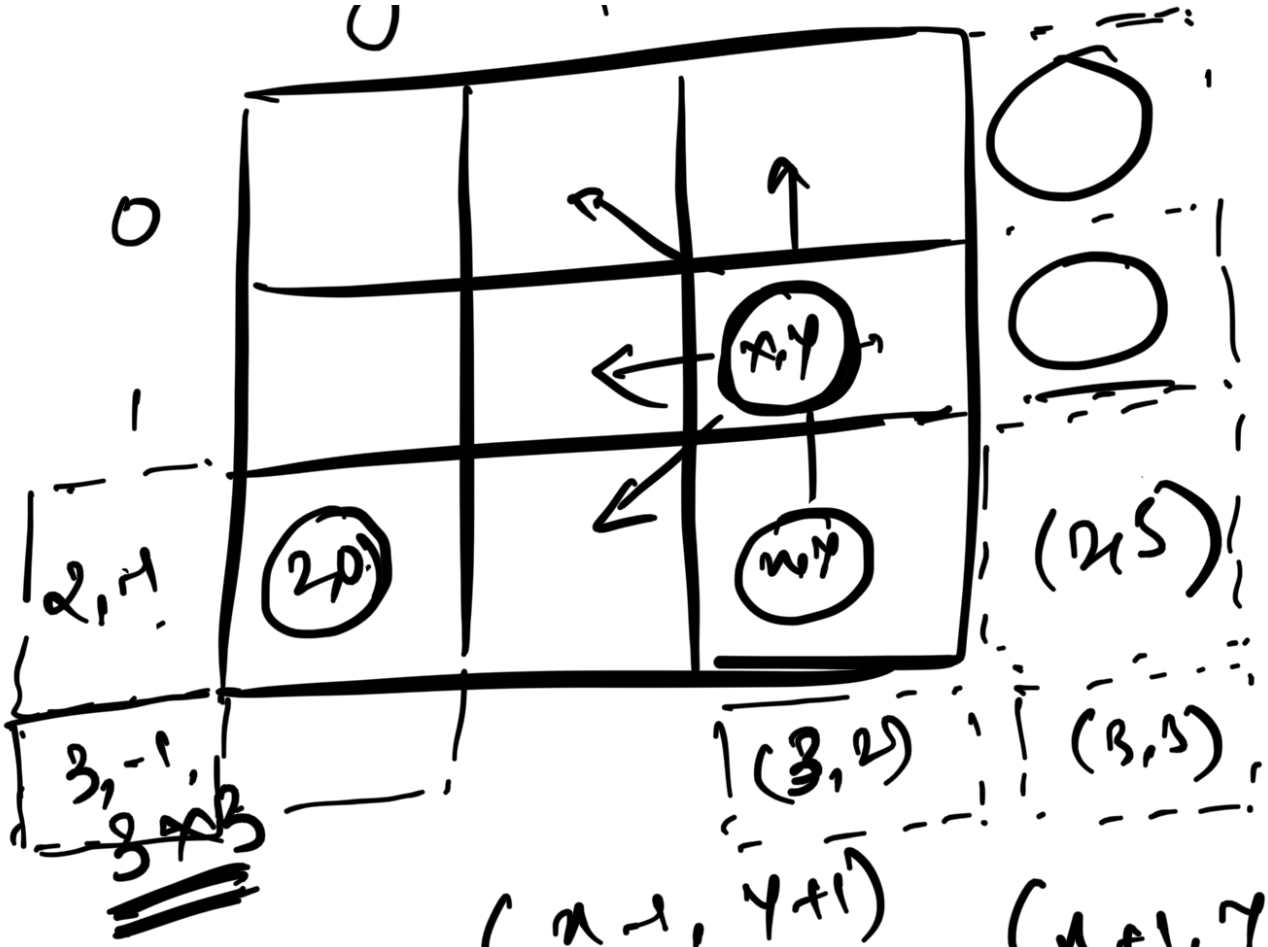
index = 0

cell → row, col.

newRow = row + x[index]

newCol = col + y[index]

→ row - 1, col



$(x-1, y+1)$, $(x+1, y+1)$

$(x, y+1)$,

(2,2)

(3,2)

(1,2) → (0,3)

---

when I say, the new
ell will go out of the 2D
array →

- 2 arr. length

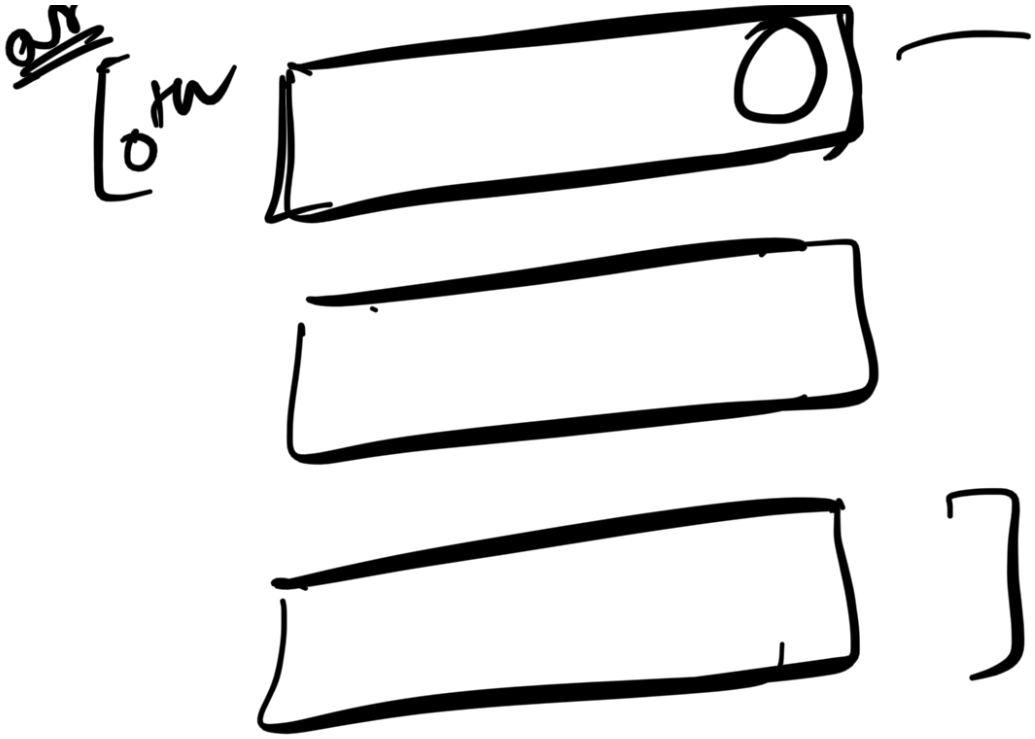
{ row = =
  col = = arr(0).len

arr.length
arr(0).length

my row and col.
< <
arr.length arr(0).length

row >=0 && col >=0

(row >=0 && col >=0 &&
row < arr.length &&
col < arr(0).length)



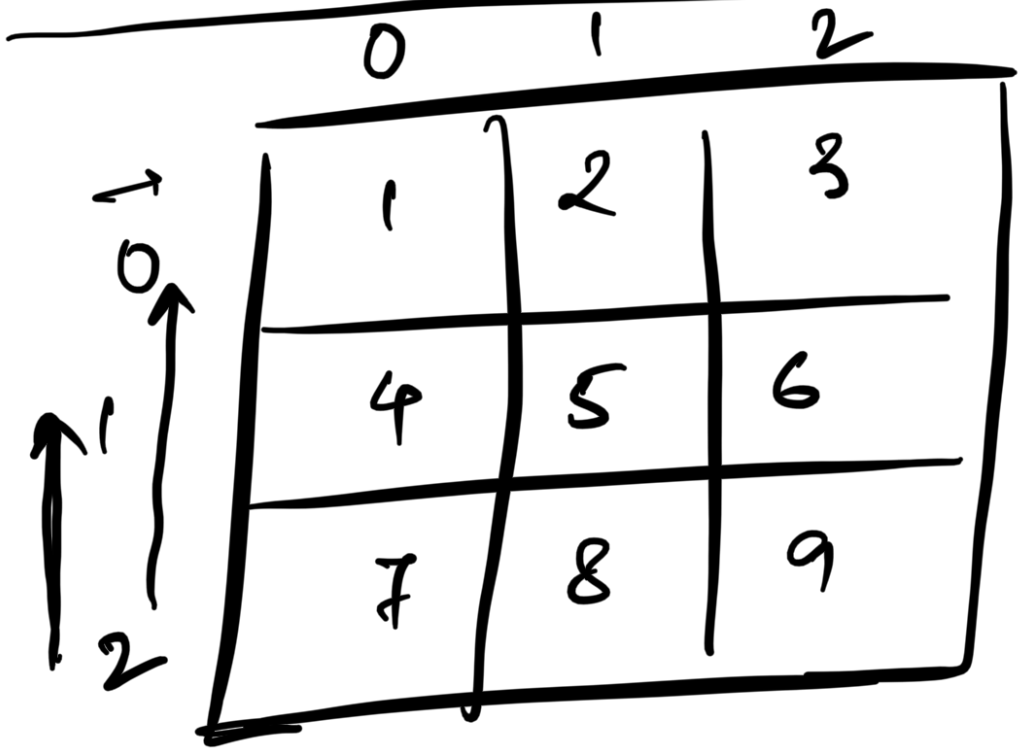
arr(0).length -1

---

① I will take each cell of the bomb array

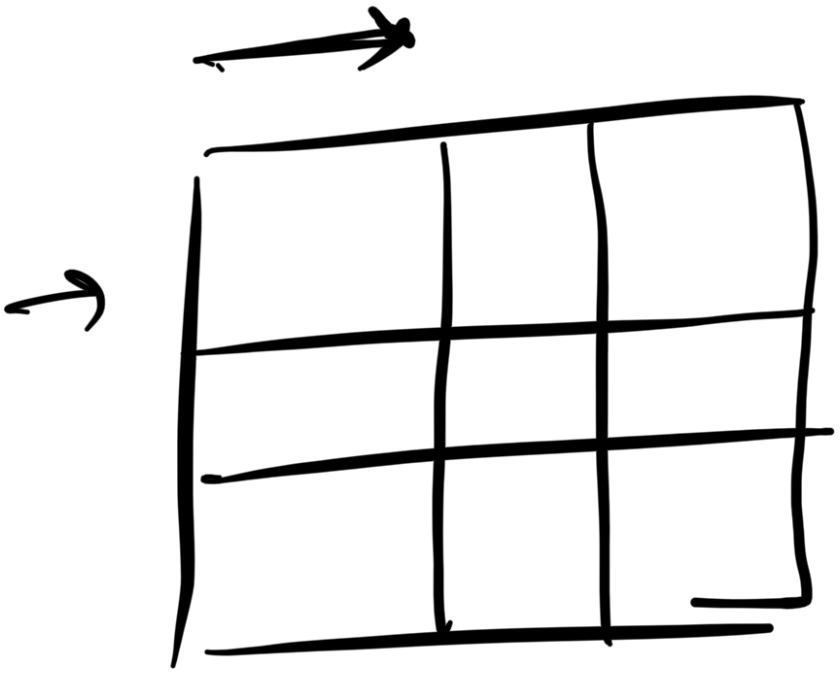
② I will take every new surrounding cell and if the cell is inside my matrix

* increment count of cell.



(0,0)
(1,0)
(2,0)

(0,0), (0,1)
(0,2)



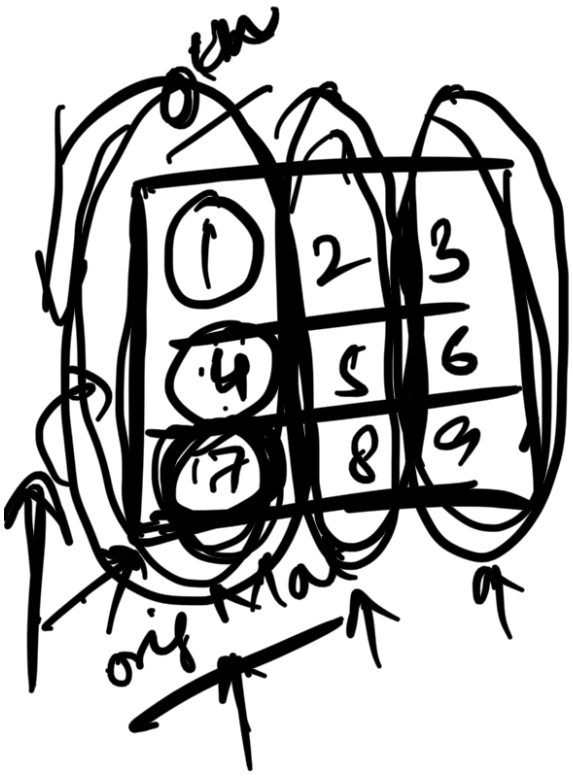
row = 3 →
col = 3

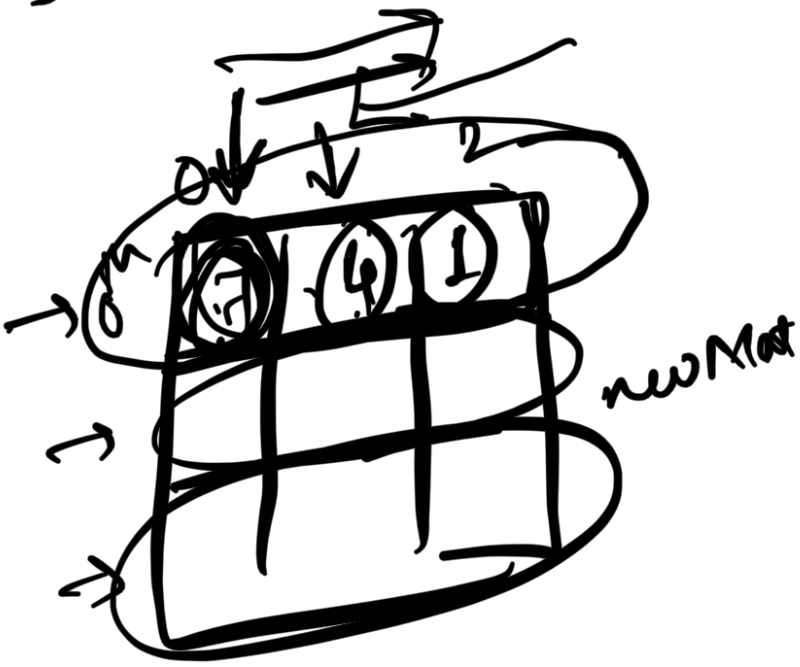
r → 0,1,2
col = 2,0

for (int c=0, r = row.length-1;

r >= 0; r --, c++) {

newMat[0][r] = oldMat[][0]



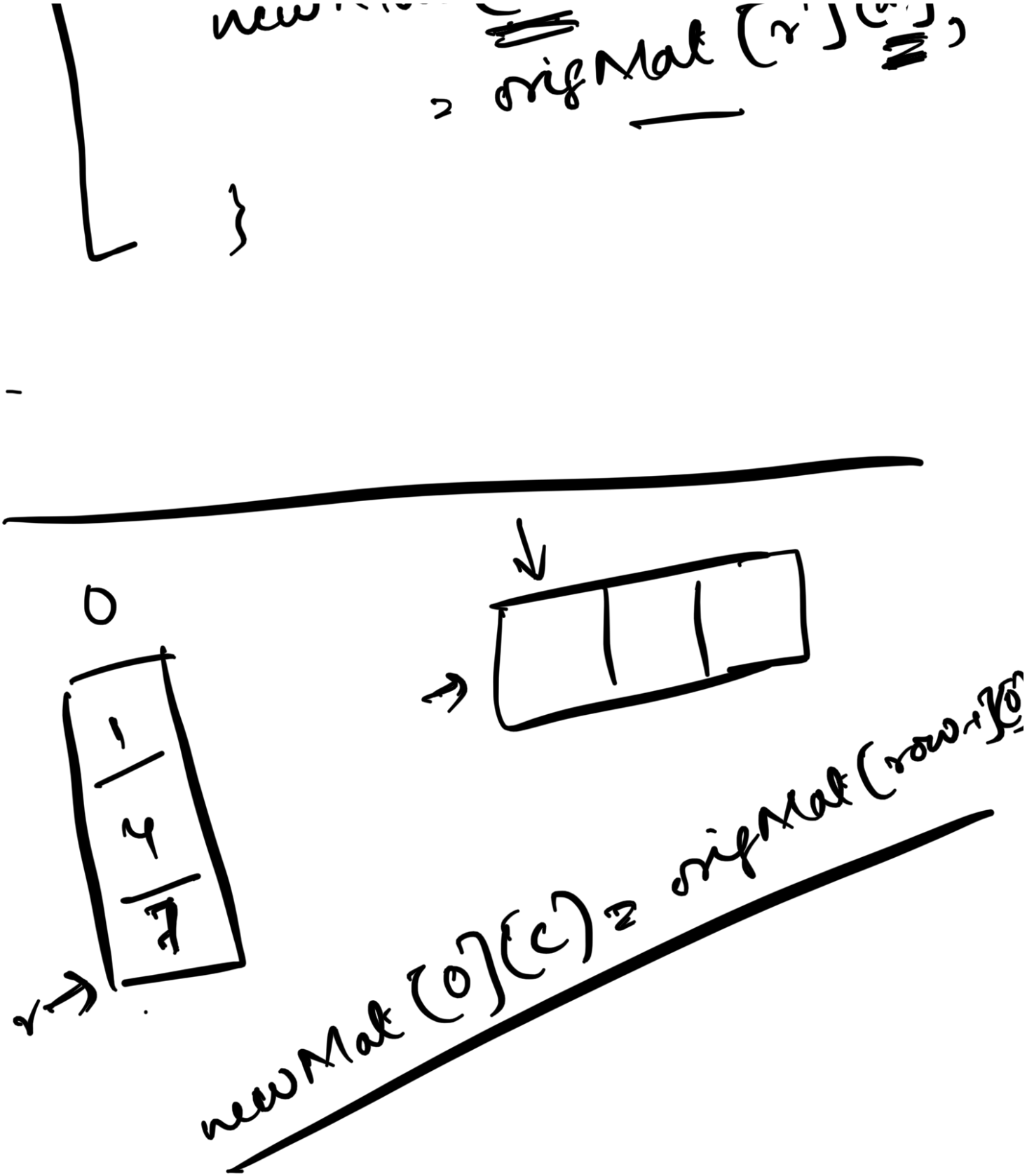


for (col = 0; col < colCount; col++) {

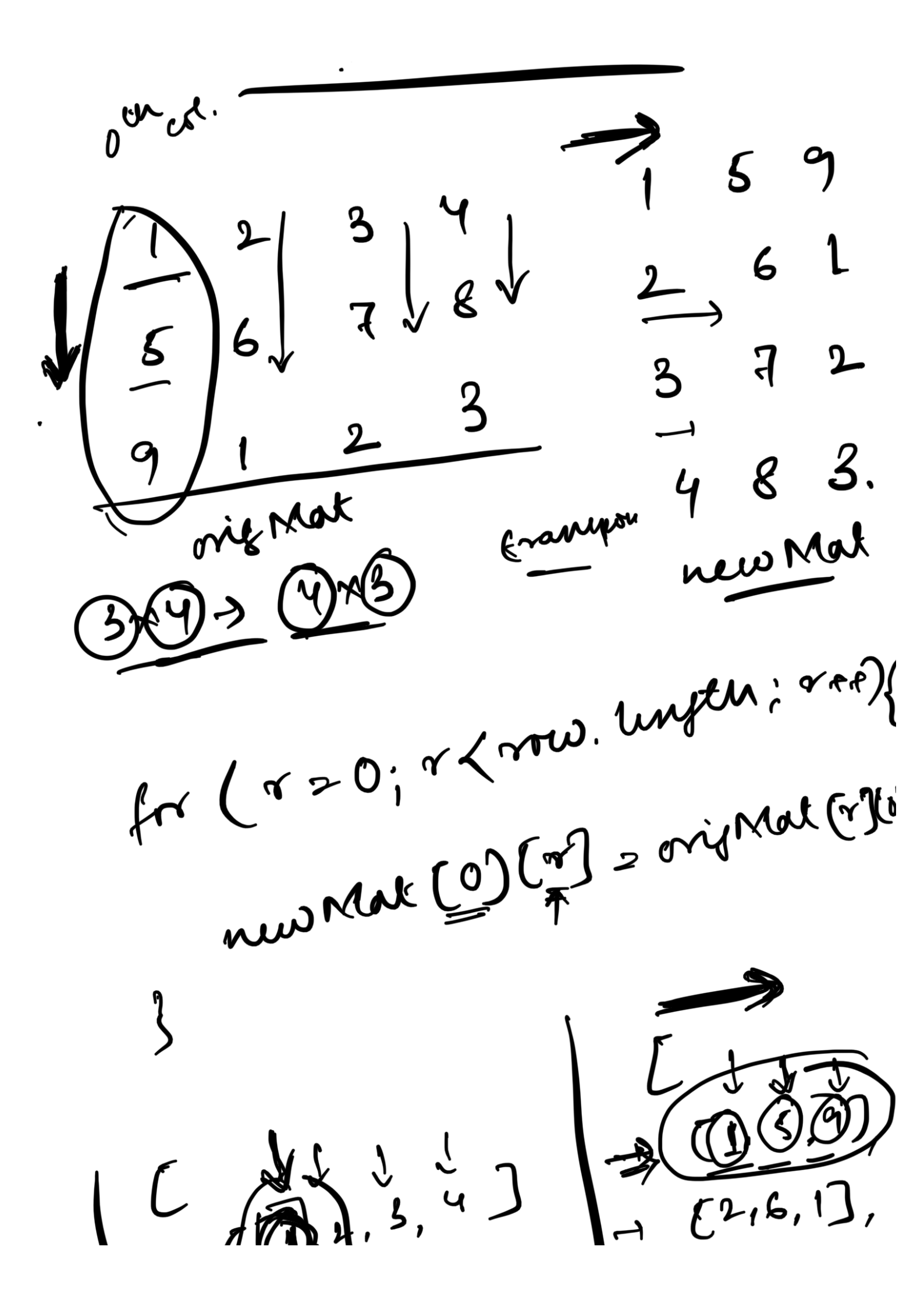
for (r = rowCount - 1, c = 0; r >= 0;

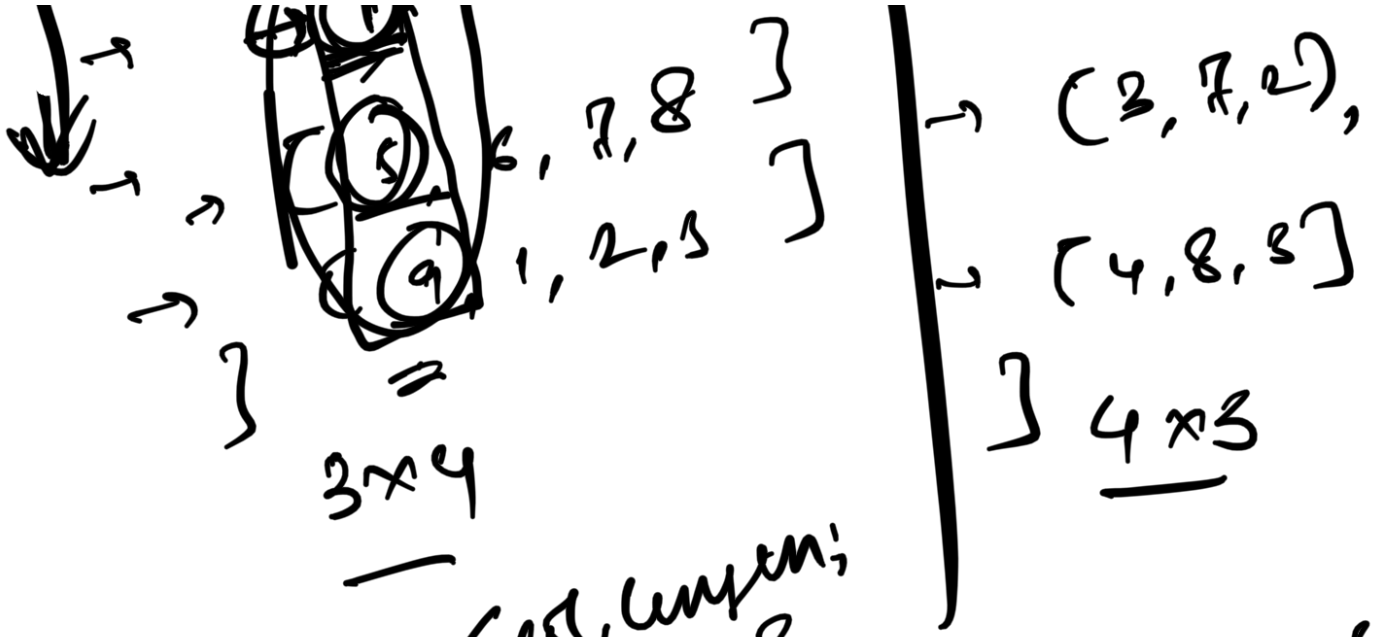
r--; c++) {

newMat[col][c]



Transpose of Matrix


Our col.
1 2 3 4
5 6 7 8
9 1 2 3
origMat
1 5 9
2 6 1
3 7 2
4 8 3.
transpose
newMat
3×4 → 4×3
for (r = 0; r < row.length; r++){
newMat[0][r] = origMat[r][0
}
[1, 2, 3, 4]
[1, 5, 9]
[2, 6, 1],




```
for (c=0; c<col.length; c++) {
  for (r=0; r<rowCount; r++) {
    newMat[c][r] = origMat[r][c];
  }
}
```

r, c

(0,0) → (0,0)

(1,0) → (0,1)

(0,2)

(3,0) → (0,3)