

Revision.

↳ Que. 2D Arrays.

$k=3$

1	2	3	4
5	6	7	8
9	1	4	3

4	1	2	3
6	7	6	5
3	9	1	2

rotate
individual
rows.

Compare 2 matrix.

A
 $m \times n$

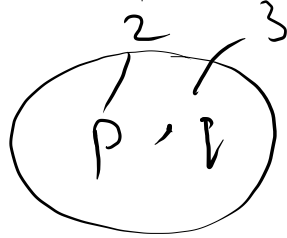
B
 $p \times q$

$m == p$
 $n == q$ →

0	0	0	0
0	0	0	0
0	0	0	0

1D Array - 2D Array

n



$$n = p * q$$

✓	✓	✓
0	1	2
3	4	5

mapping.

$$\text{idx} = 4$$

↳ 2D.

$$\begin{cases} i = \text{idx} / q = 1 \\ j = \text{idx} \% q = 1 \end{cases}$$

Modify The Matrix

```

3
4
1 0 0 1
0 0 1 0
0 0 0 0
    
```

Sample Output 0

```

1 1 1 1
1 1 1 1
1 0 1 1
    
```

R

--	--	--	--

C

--	--	--	--

	0	1	2	3
0				
1				
2				

0, 1

$R[0]$ or $C[1]$

0 \rightarrow ① 0

$R[2]$ or $C[0]$ 2, 0

~~$R[2]$ or $C[1]$~~

①

```

public static void main(String[] args) {
    Scanner scn = new Scanner(System.in);
    int m = scn.nextInt();
    int n = scn.nextInt();
    int [][] A= new int[m][n];

    for(int i = 0; i < m; i++){
        for(int j = 0; j < n; j++){
            A[i][j] = scn.nextInt();
        }
    }
}

```

②

```

//logic
boolean [] R = new boolean[m];
boolean [] C = new boolean[n];

for(int i = 0; i < m; i++){
    for(int j = 0; j < n; j++){
        if(A[i][j] == 1){
            R[i] = true;
            C[j] = true;
        }
    }
}

//process
for(int i = 0; i < m; i++){
    for(int j = 0; j < n; j++){
        if(R[i] == true || C[j] == true){
            A[i][j] = 1;
        }
    }
}
}

```

③

```

//display
for(int [] d : A){
    for(int e : d){
        System.out.print(e + " ");
    }
    System.out.println();
}
}

```

N Queens Check

Sample Input 0

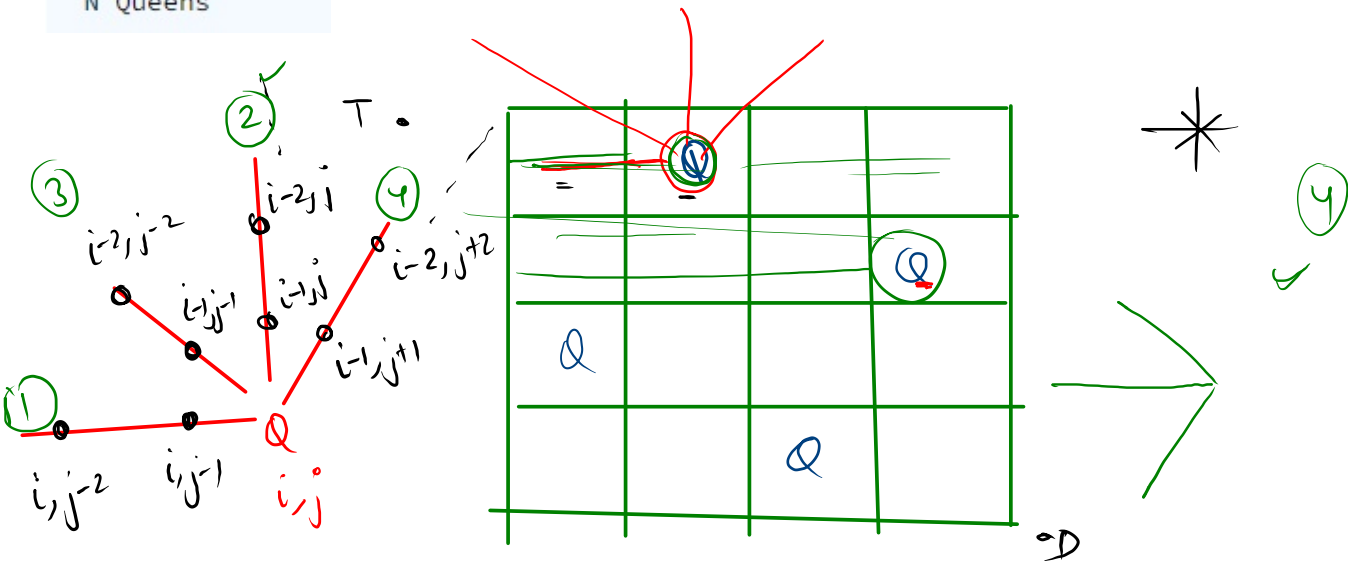
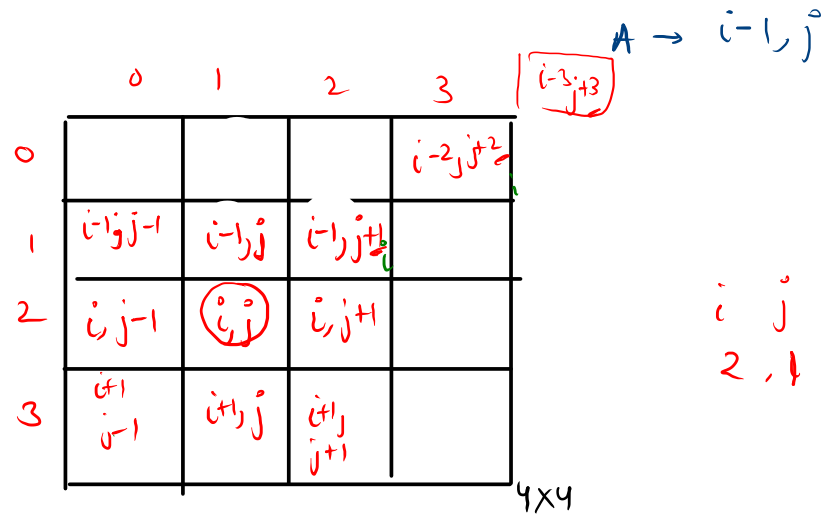
```

4
0 1 0 0
0 0 0 1
1 0 0 0
0 0 1 0
    
```

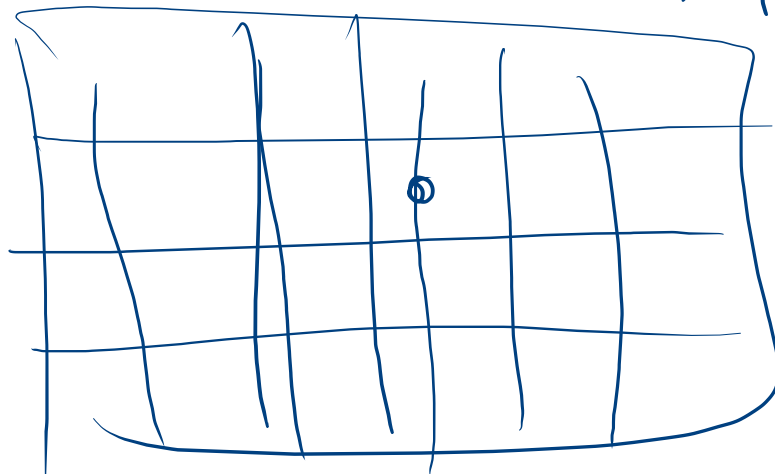
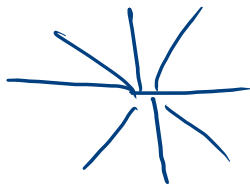
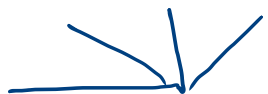
Sample Output 0

```

N Queens
    
```



$L \rightarrow R$
 $T \rightarrow D$



$D - T$
 $R - L$