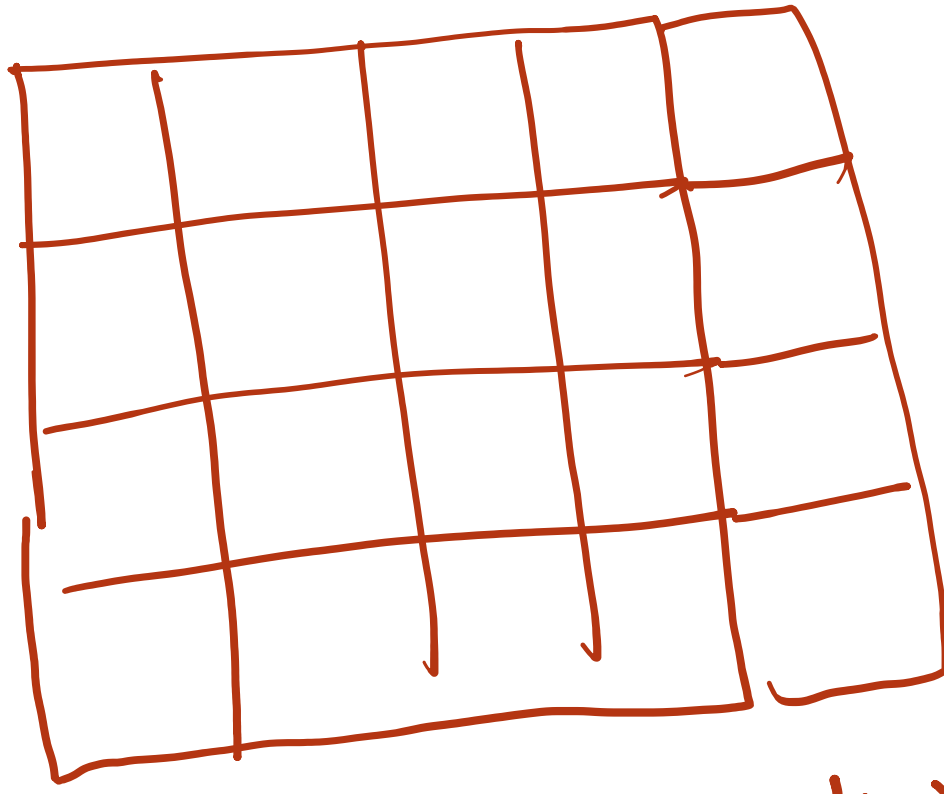


2D Array matrix 2D ✓
2D continuous



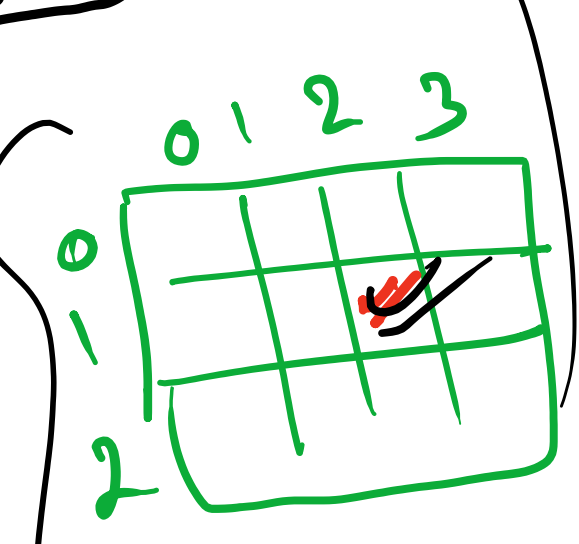
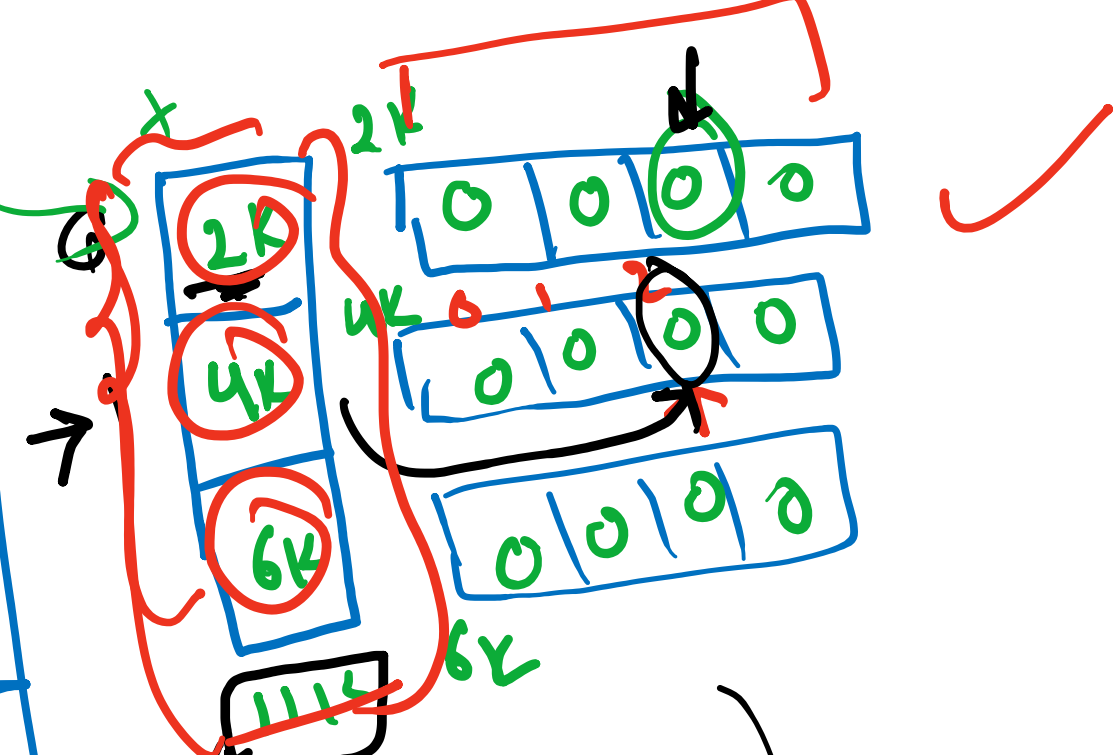
4x5

```
public static void main(String[] args) {  
    // TODO Auto-generated method stub  
    int[][] arr = new int[3][4];  
}
```

arr() (n)



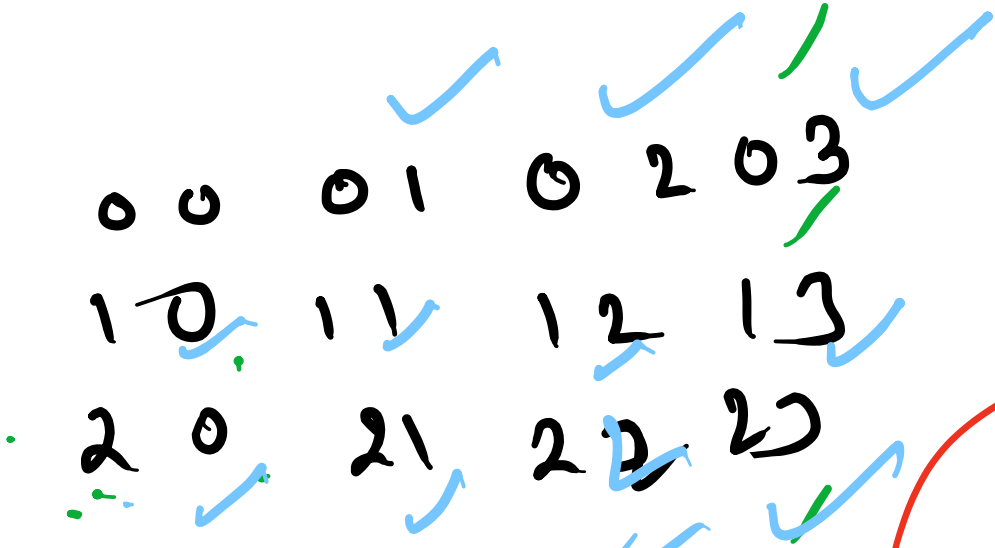
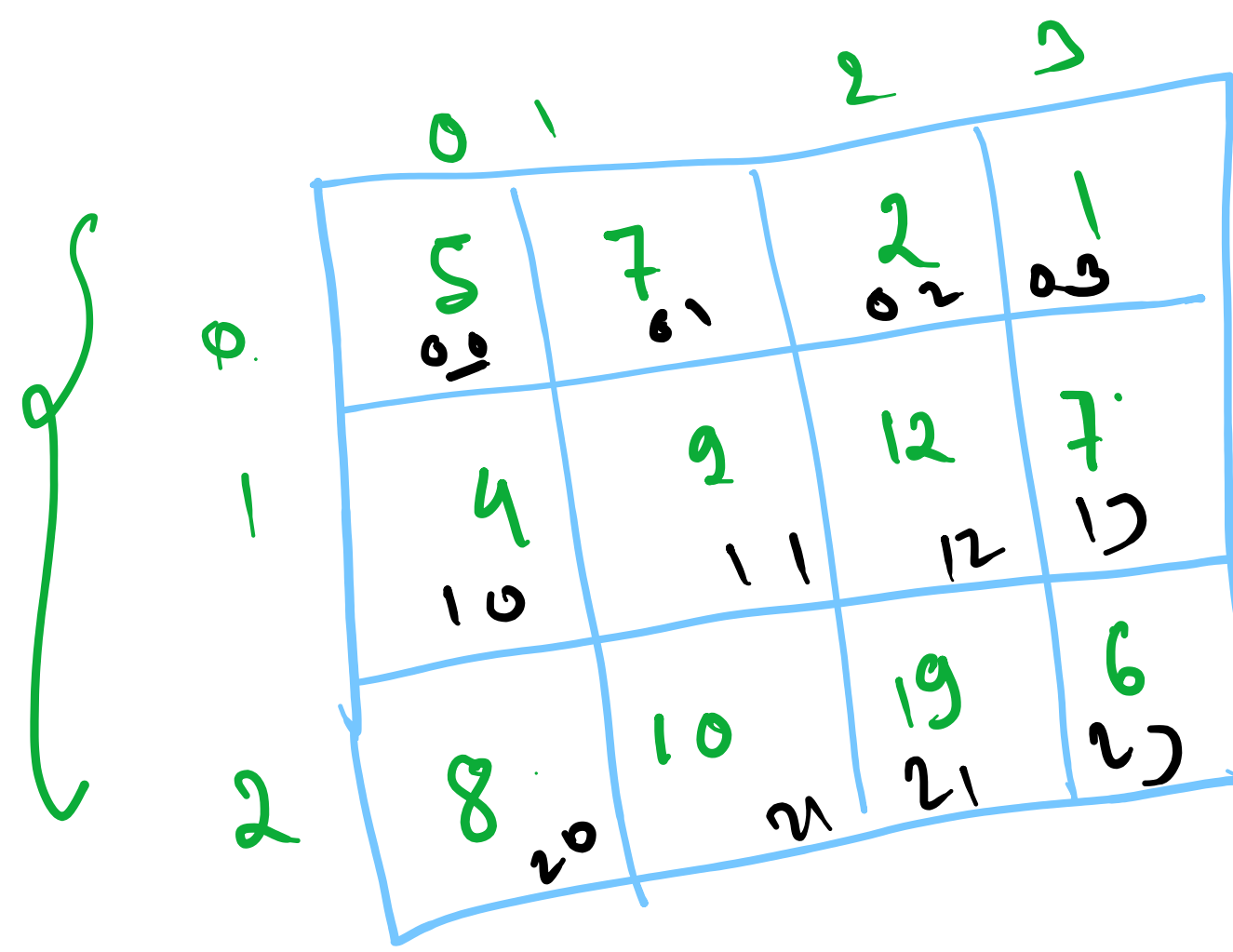
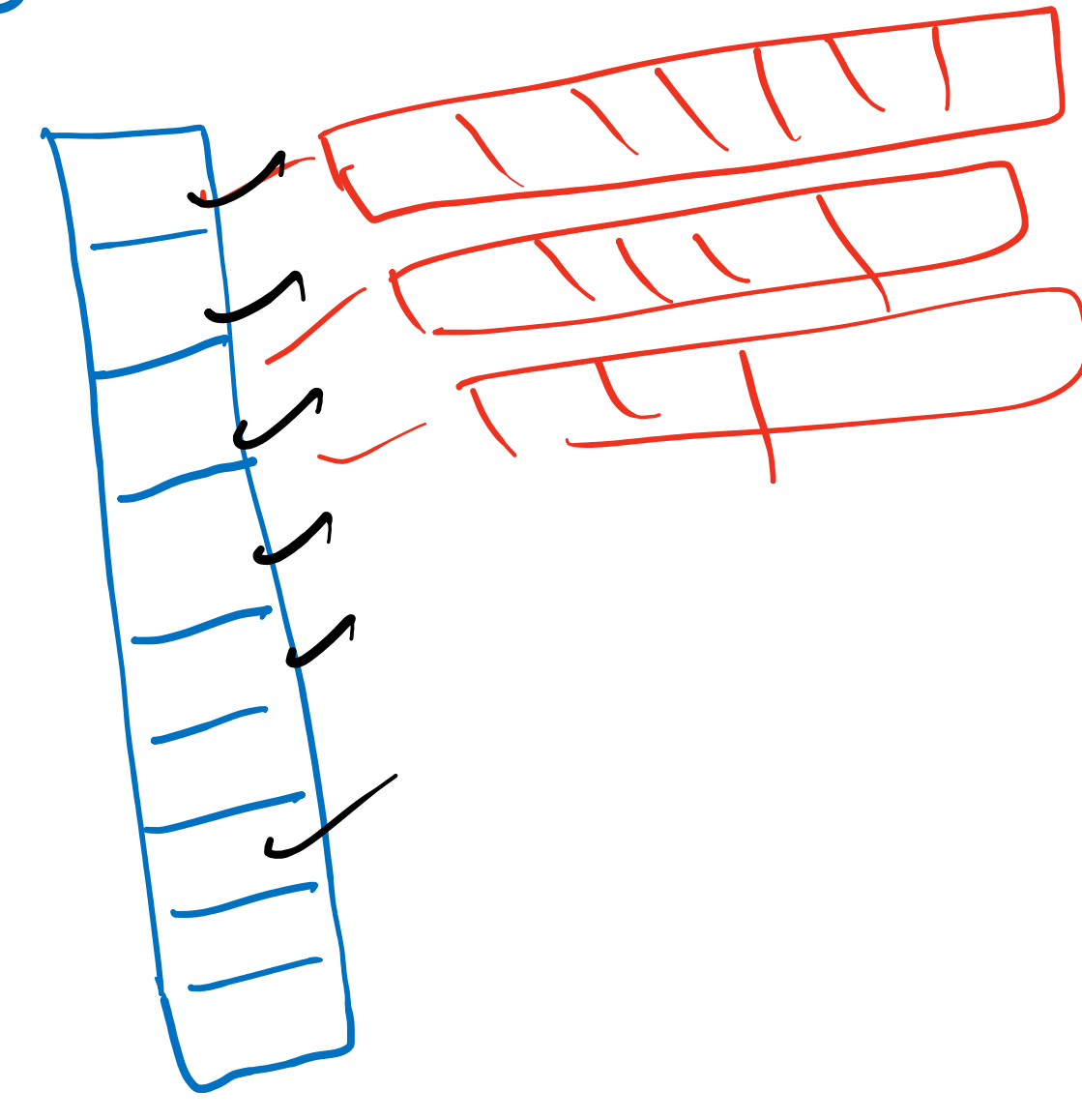
main



int c() arr = new int c() (n)

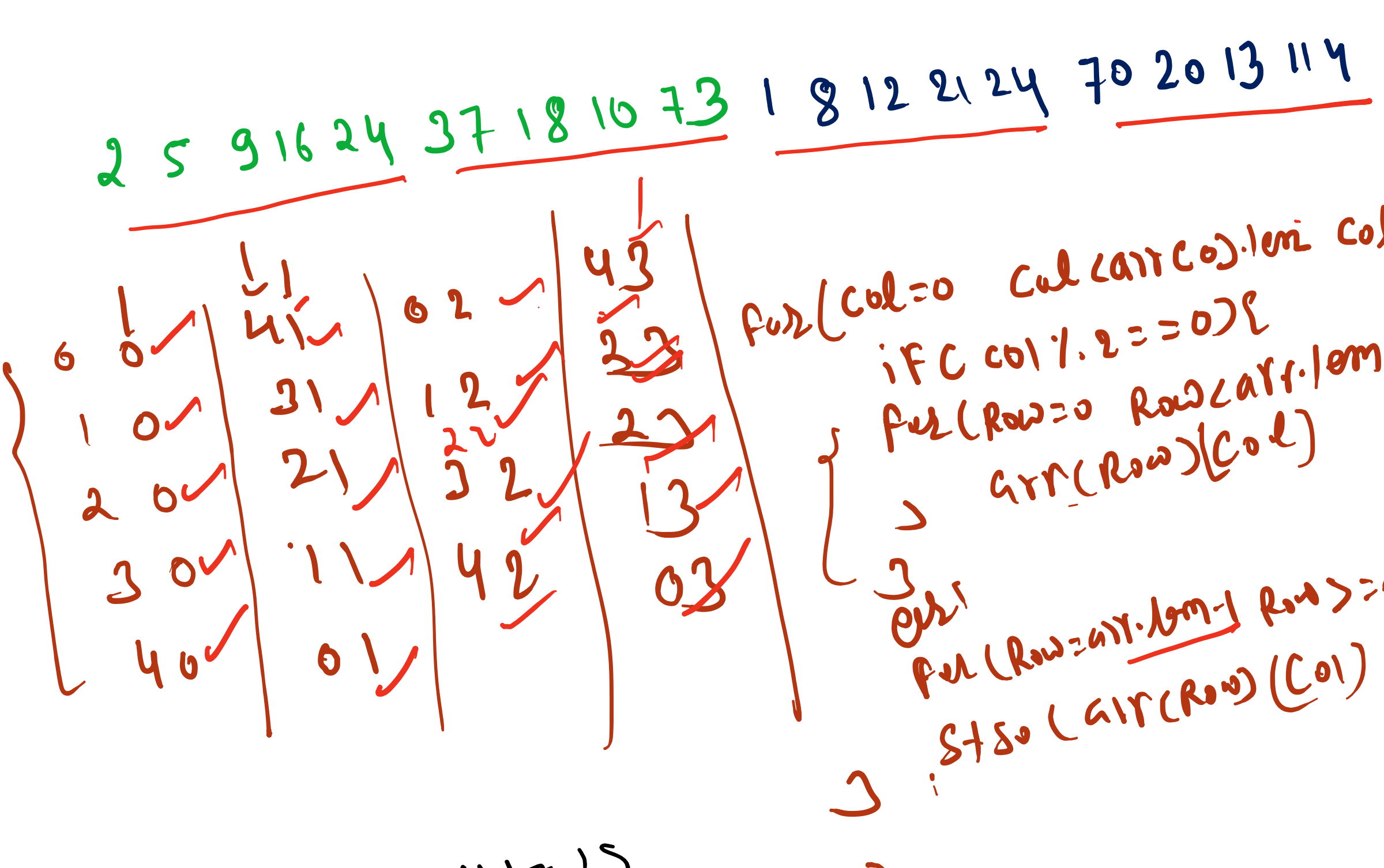
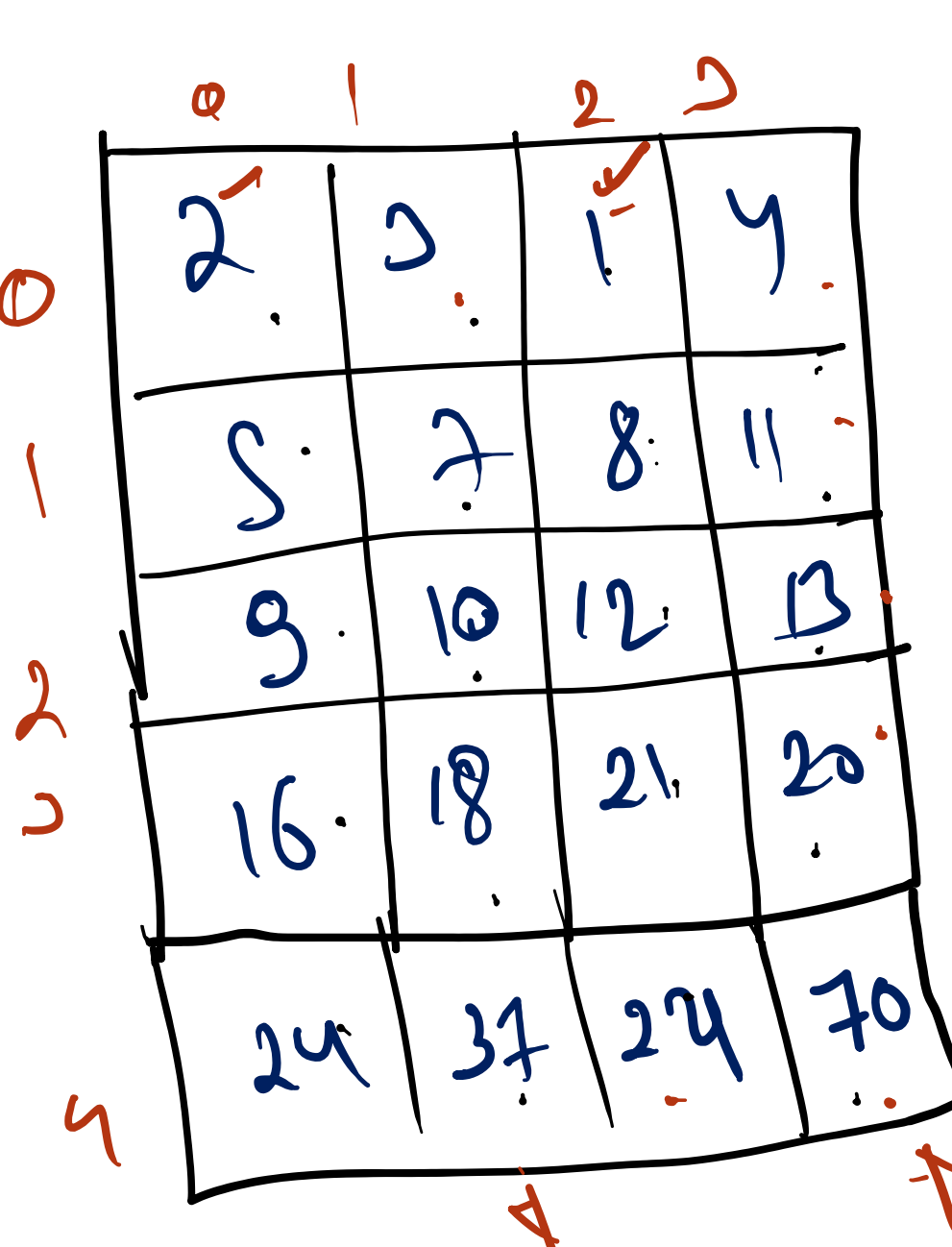
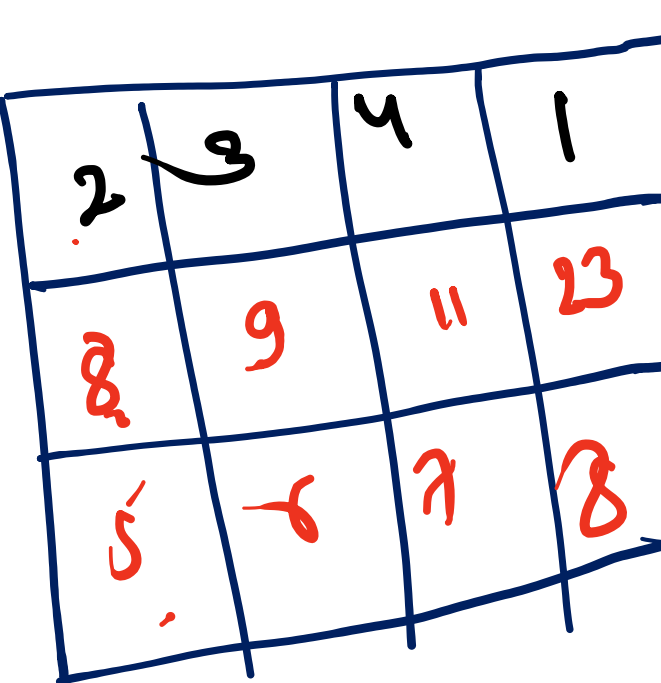
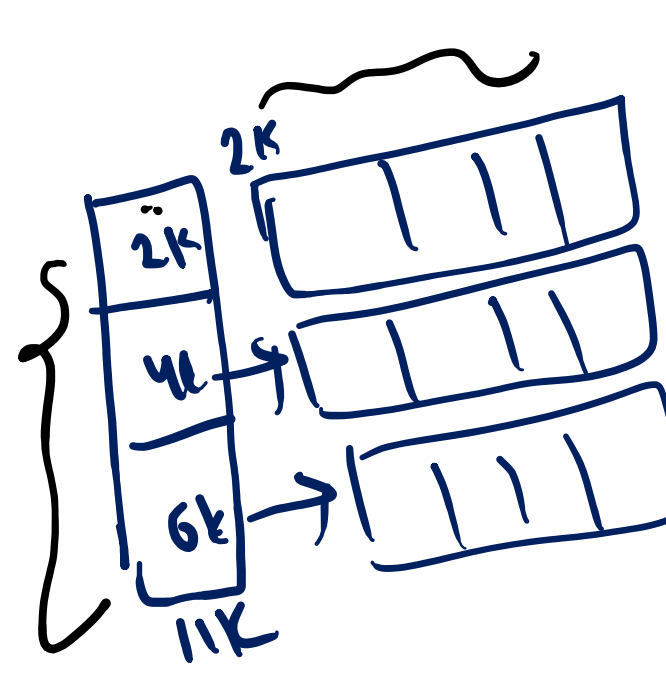
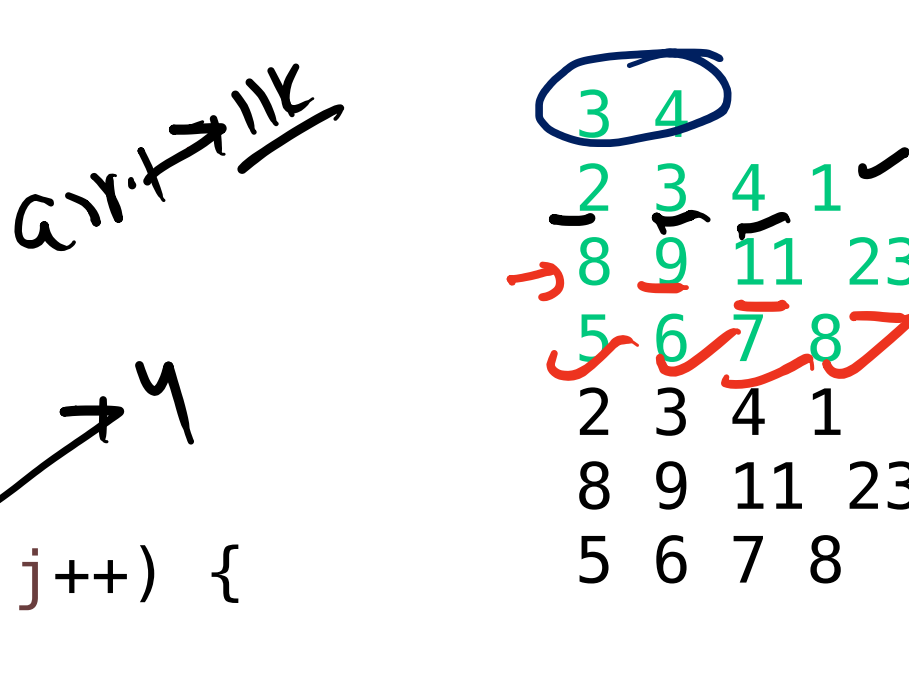
Total Number 1D Array

1 + n



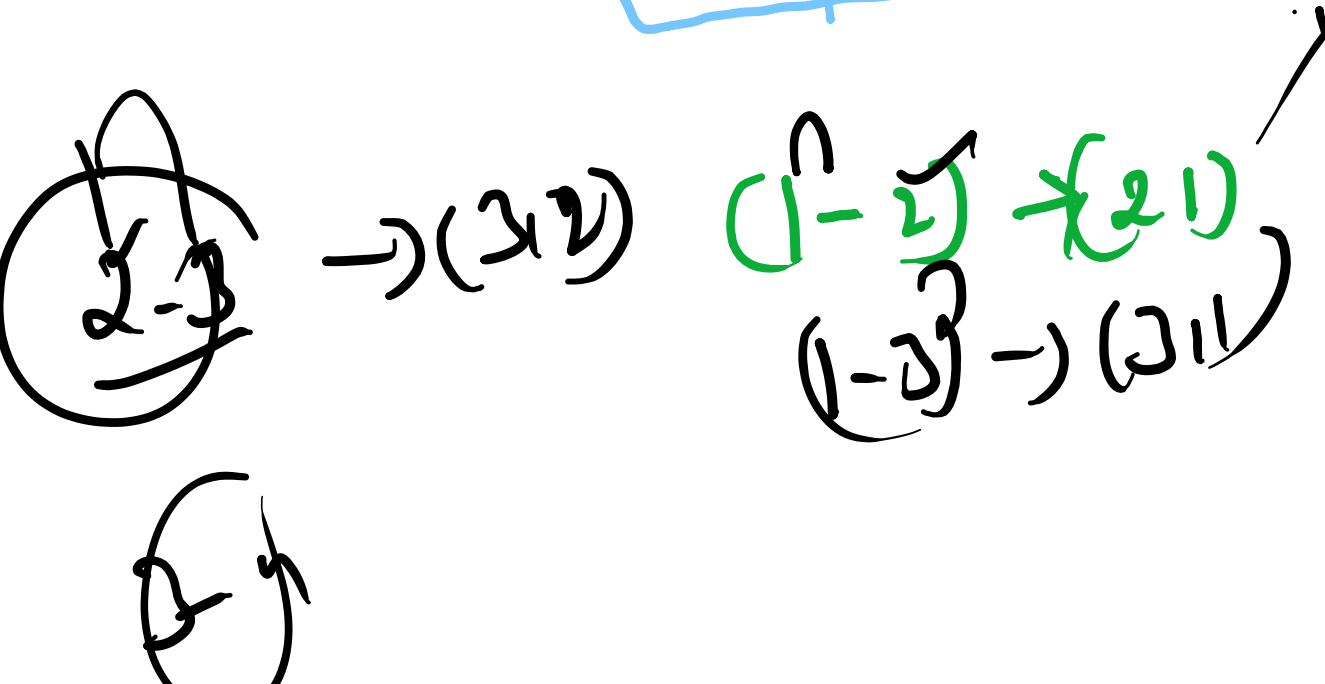
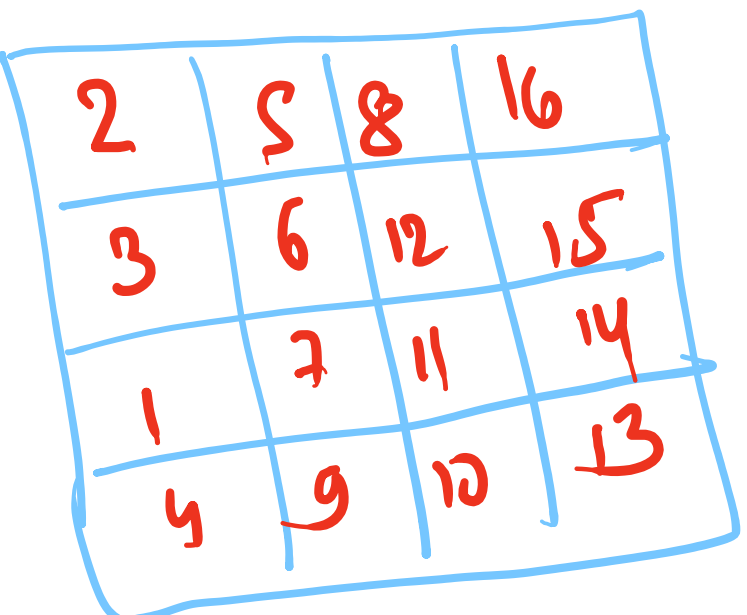
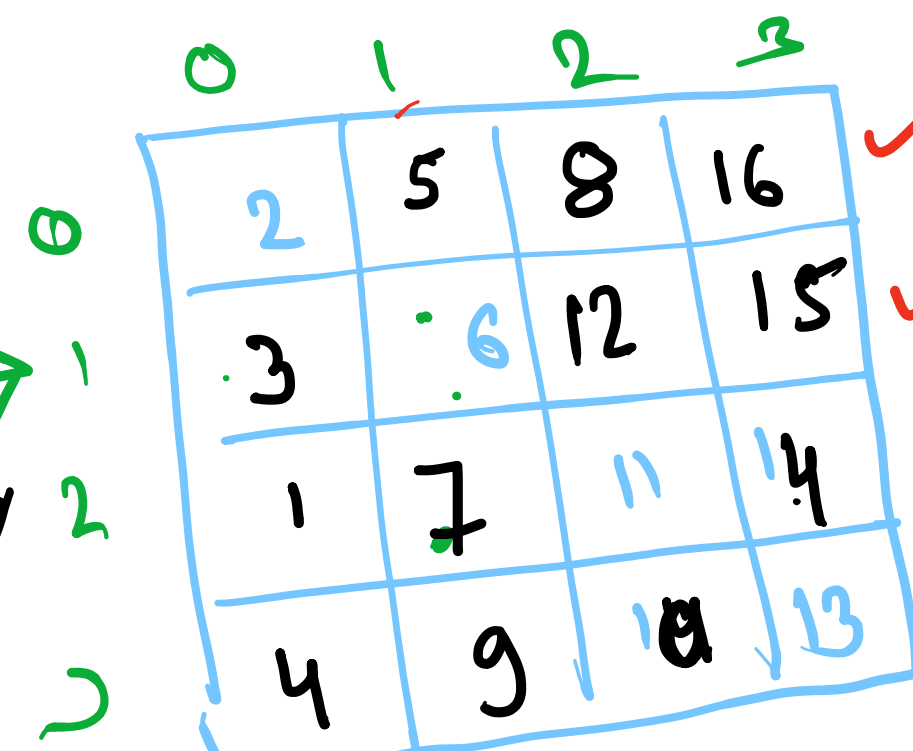
for (i=0; i < arr.length; i++)
for (j=0; j < arr[i].length; j++)
arr[i][j] = sc.nextInt();

```
public class Take_Input_OutPut {  
    public static void main(String[] args) {  
        // TODO Auto-generated method stub  
        Scanner sc = new Scanner(System.in);  
        int n = sc.nextInt();  
        int m = sc.nextInt();  
        int[][] arr = new int[n][m];  
        for (int i = 0; i < arr.length; i++)  
            for (int j = 0; j < arr[i].length; j++) {  
                arr[i][j] = sc.nextInt();  
            }  
        Display(arr);  
    }  
    public static void Display(int[][] arr) {  
        for (int i = 0; i < arr.length; i++) {  
            for (int j = 0; j < arr[i].length; j++) {  
                System.out.print(arr[i][j] + " ");  
            }  
            System.out.println();  
        }  
    }  
}
```

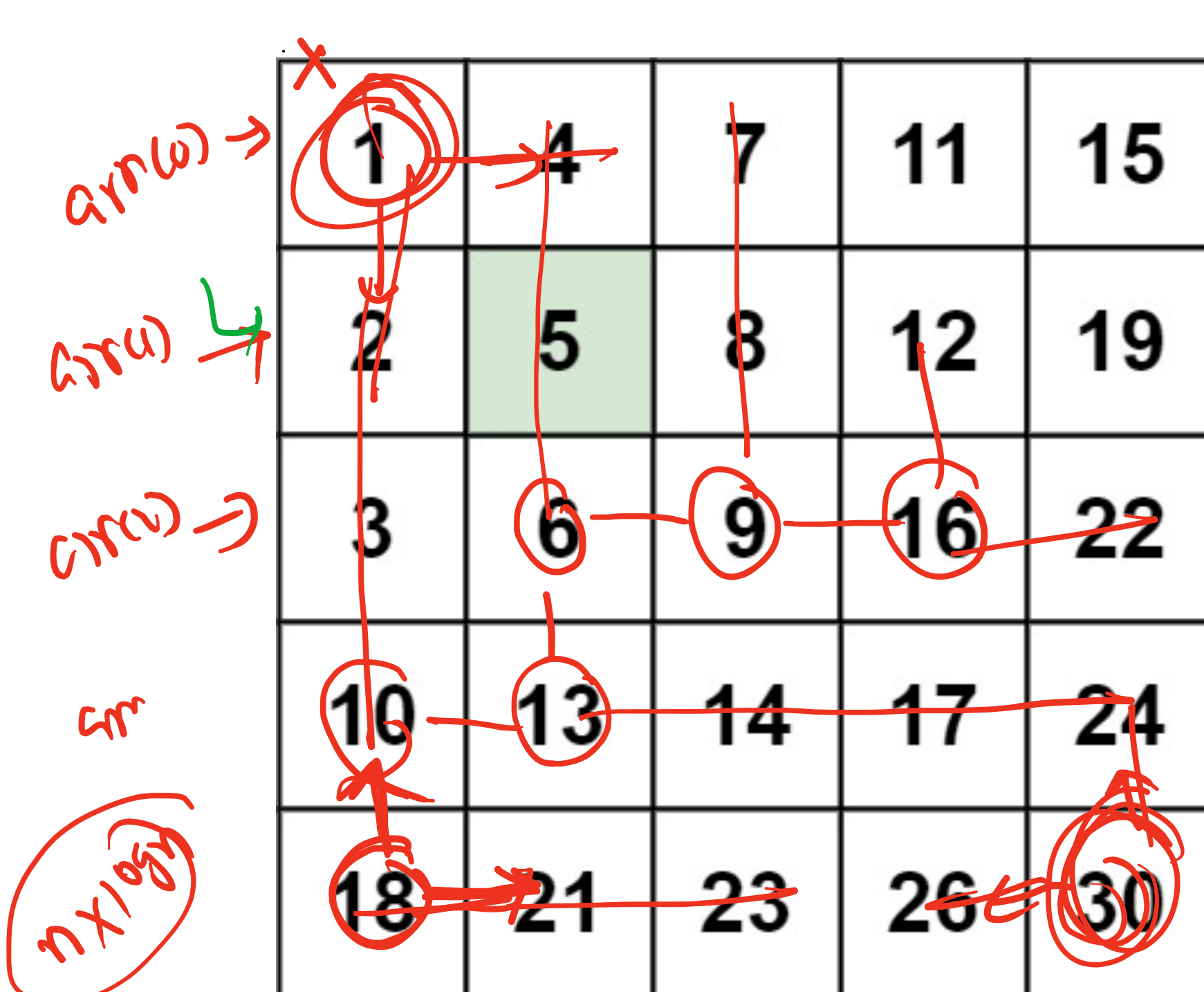


for (i=0; i < arr.length; i++)
for (j=0; j < arr[i].length; j++)

```
int[][] arr = { { 2, 3, 1, 4 },  
                { 5, 6, 7, 9 },  
                { 8, 12, 11, 10 },  
                { 16, 15, 14, 13 } };
```



(0-1) → (1-0)
(0-2) → (2-0)
(0-3) → (3-0)



Sorted

(n/n)
R → C++

while (R < arr.length & C < arr[0].length) {
 if (arr[R][C] < arr[R+1][C])
 return true;
 else if (arr[R][C] > arr[R+1][C])
 C++;
 else
 R++;
}

for (i=0; i < arr.length; i++)
for (j=0; j < arr[i].length; j++)
if (arr[i][j] < arr[i+1][j])
return true;