

Given an $m \times n$ matrix, return *all elements of the matrix in spiral order*.

Example 1:

1	→	2	→	3
4	→	5		↓
↑				↓
7	←	8	←	9

Input: matrix = [[1,2,3],[4,5,6],[7,8,9]]

Output: [1,2,3,6,9,8,7,4,5]

Example 2:

1	→	2	→	3	→	4
5	→	6	→	7		↓
↑						↓
9	←	10	←	11	←	12

Input: matrix = [[1,2,3,4],[5,6,7,8],[9,10,11,12]]

Output: [1,2,3,4,8,12,11,10,9,5,6,7]

Constraints:

- $m == \text{matrix.length}$
- $n == \text{matrix}[i].\text{length}$

- $1 \leq m, n \leq 10$
- $-100 \leq \text{matrix}[i][j] \leq 100$

Solution:

```
class Solution {
    public List<Integer> spiralOrder(int[][] matrix) {
        List<Integer> ans=new ArrayList<>();
        int startrow=0,startcol=0,endrow=matrix.length-1,endcol=matrix[0].length-1;
        while(startcol<=endcol&&startrow<=endrow){
            for(int i=startcol;i<=endcol;i++){
                ans.add(matrix[startrow][i]);
            }
            for(int j=startrow+1;j<=endrow;j++){
                ans.add(matrix[j][endcol]);
            }
            for(int k=endcol-1;k>=startcol;k--){
                if(startrow==endrow){
                    break;
                }
                ans.add(matrix[endrow][k]);
            }
            for(int l=endrow-1;l>=startrow+1;l--){
                if(startcol==endcol){
                    break;
                }
                ans.add(matrix[l][startcol]);
            }
            startrow++;
            endrow--;
            startcol++;
            endcol--;
        }
        return ans;
    }
}
```