

You have been given a matrix 'MAT' of size 'N' * 'M' (where 'N' and 'M' denote the number of rows and columns respectively) and a positive integer 'K'. Your task is to rotate the matrix to the right 'K' times.

Note:

Right rotation on a matrix is shifting each column to the right side (the last column moves to the first column) and 'K' times means performing this rotation 'K' times.

Example:

For 'K' = 1 and the given 'MAT':

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

Output after rotating 'MAT' one time is:

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

Input Format:

The first line of input contains an integer 'T' representing the number of test cases.

The first line of each test case contains three single space-separated integers 'N', 'M', and 'K', respectively. 'N' and 'M' represent the rows and columns of the matrix and 'K' denotes the number of right rotations to be performed.

Then each of the next 'N' lines of each test case contains 'M' single space-separated integers representing the elements in a row of the matrix.

Output Format:

For each test case, return the elements of the matrix row-wise after rotation in a single line.

Note:

You don't need to print the output, It has already been taken care of. Just implement the given function.

Constraints:

```
1 <= T <= 10
1 <= N <= 200
1 <= M <= 200
0 <= K <= 10^9
1 <= MAT[i][j] <= 10^5
```

Where 'MAT[i][j]' denotes the element in the 'i'th row and 'j'th column of the matrix.

Time limit: 1 sec

Sample Input 1 :

```
2
3 3 2
10 20 30
40 50 60
70 80 90
2 2 2
1 2
3 4
```

Sample Output 1 :

```
20 30 10 50 60 40 80 90 70
1 2 3 4
```

Explanation For Sample Output 1:

In test case 1, Performing right rotation for the first time ('K' = 1) we get:

```
30 10 20
60 40 50
90 70 80
```

Performing right rotation for the second time ('K' = 2) we get:

```
20 30 10
50 60 40
80 90 70
```

The matrix after rotations will be printed in a single line row-wise. Therefore, the output is:

20 30 10 50 60 40 80 90 70

In test case 2, Performing right rotation for the first time ('K' = 1) we get:

2 1
4 3

Performing right rotation for the second time ('K' = 2) we get:

1 2
3 4

The matrix after rotations will be printed in a single line row-wise. Therefore, the output is:

1 2 3 4

Sample Input 2 :

2
2 3 2
1 2 3
4 5 6
4 4 1
1 2 3 4
5 6 7 8
9 10 11 12
13 14 15 16

Sample Output 2 :

2 3 1 5 6 4
4 1 2 3 8 5 6 7 12 9 10 11 16 13 14 15

Explanation For Sample Output 2:

In test case 1, Performing right rotation for the first time ('K' = 1) we get:

3 1 2
6 4 5

Performing right rotation for the second time ('K' = 2) we get:

2 3 1

5 6 4

The matrix after rotations will be printed in a single line row-wise. Therefore, the output is:

2 3 1 5 6 4

In test case 2, Performing right rotation for the first time ('K' = 1) we get:

4 1 2 3

8 5 6 7

12 9 10 11

16 13 14 15

The matrix after rotations will be printed in a single line row-wise. Therefore, the output is:

4 1 2 3 8 5 6 7 12 9 10 11 16 13 14 15