

You have given a 2-dimensional array 'ARR' with 'N' rows and 'M' columns in which each element contains only two values,i.e., 0 and 1. Your task is to convert the given matrix into the Good matrix in which if an element is 0, you need to set all elements values present in its entire row and column to 0.

For example:

```
Consider ARR = [[1 , 0 , 1] ,
                [1 , 1 , 1] ,
                [1 , 1 , 1]],
```

the Good matrix after updating the given matrix as described in the question is

```
[[0 , 0 , 0] ,
 [1 , 0 , 1] ,
 [1 , 0 , 1]].
```

Since ARR[0][1] is 0, we need to set all element's values present in 0-th row and 1-th column to 0.

**Note :**

You do not need to print the matrix. Just change in the given input.

**Input Format :**

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

The first line of each test case contains two integers, 'N' and 'M', denoting the number of rows and columns in the array.

The Next 'N' lines of each test case contain 'M' space-separated integers denoting the elements of the array 'ARR'.

**Output Format :**

For each test case, return the Good matrix after updating the given matrix as described in the question.

Print the output of each test case in a separate line

**Constraints :**

1 <= T <= 20

1 <= N <= 300

1 <= M <= 300

ARR[i][j] can only contain two values, i.e, 0 and 1.

Where 'T' denotes the number of test cases, 'N' and 'M' denotes the number of rows and the number of columns in the array 'ARR' respectively, and 'ARR[i][j]' denotes the 'j-th' element of 'i-th' row of the array 'ARR'.

Time Limit: 1sec

**Sample Input 1 :**

```
2
2 2
0 1
1 1
3 3
1 1 0
1 1 1
1 1 1
```

**Sample Output 1 :**

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

**Explanation Of Sample Input 1:**

For the first test case,

The Good matrix after updating the given matrix as described in the question is

```
[[0 , 0] ,
 [0 , 1]].
```

Since ARR[0][0] is 0, we need to set all elements value present in 0-th row and 0-th column to 0.

For the second test case,

The Good matrix after updating the given matrix as described in the question is

```
[[0 , 0 , 0] ,
 [1 , 1 , 0] ,
 [1 , 1 , 0]].
```

Since ARR[0][2] is 0, we need to set all elements value present in 0-th row and 2-th column to 0.

**Sample Input 2 :**

```
2
4 4
1 1 1 1
0 1 1 1
1 1 1 1
0 1 1 1
3 3
0 1 1
0 1 1
1 1 1
```

**Sample Output 2 :**

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