Description   **My Submissions**   **Hints/Editorial**   **AC Submissions**   **My Notes (0)**

Rectangle Sum Query

🔖   **?** Ask Doubt

⏱ Time-Limit: 4 sec   ✏ Score: 0/100   <u>Difficulty :</u> ★★

💾 Memory: 256 MB   ✔ Accepted Submissions: 100 <u>Relevant For:</u>   AZ-201   AZ-202

Description

Given a 2d-array of dimension *N*M* and *Q* queries. In each query four integers *x1, y1, x2, y2* is given, you have to find the sum of submatrix with *(x1,y1)* be the leftmost corner and *(x2,y2)* be the rightmost corner %10^9+7.

Input Format

The first line contains three space-separated integers *N, M, Q* where 1<=N, M<=10^3, 1<=Q<=10^6.

Next *N* lines contains *M* space-separated integers (-1e9<=A_{ij}<=1e9).

Next *Q* lines contains four space separated integers *x1, y1, x2, y2* where 1<=x1<=x2<=N, 1<=y1<=y2<=M.

Output Format

For each query print, the sum of submatrix with *(x1,y1)* be the leftmost corner and *(x2,y2)* be the rightmost corner in a new line %10^9+7.

Sample Input 1

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```
5 5 5
-1 2 3 -4 2
0 0 0 0 4
1 2 4 3 5
-1 -5 -2 3 4
0 -3 -5 3 -6
1 1 2 2
1 2 3 4
2 3 3 3
4 4 4 4
2 3 2 4
```

Sample Output 1

⧉ Copy

```
1
10
4
3
0
```

C++14[GCC] ▾

🔄 ⧉ ⬆   Submit

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