Search in a matrix

<https://www.hackerrank.com/contests/iwd-21-days-of-code-2/challenges/search-in-a-matrix-1-1>

Given a matrix mat[][] of size N x M, where every row and column is sorted in increasing order, and a number X is given. The task is to find whether element X is present in the matrix or not.

Input Format

First Line contains values of N and M

Next N lines contains M numbers

N+2th line contains value of X

Constraints

1 <= N, M <= 1005

1 <= mat[][] <= 10000000

1<= X <= 10000000

Output Format

An integer 1, if the element is present in the matrix. Otherwise, return 0.

Sample Input 0

3 3

3 30 38

44 52 54

57 60 69

62

Sample Output 0

0

Explanation 0

62 is not present in the matrix, so output is 0

Sample Input 1

1 6

18 21 27 38 55 67

55

Sample Output 1

1

Explanation 1

55 is present in the matrix at 5th cell.

Solution :

#include <cmath>

#include <cstdio>

#include <vector>

#include <iostream>

#include <algorithm>

using namespace std;

int main() {

/\* Enter your code here. Read input from STDIN. Print output to STDOUT \*/

int N,M;

cin>>N>>M;

int mat[N][M];

for(int i=0; i<N; i++){

for(int j=0; j<M; j++){

cin>>mat[i][j];

}

}

int X,count=0;

cin>>X;

for(int i=0; i<N; i++){

for(int j=0; j<M; j++){

if(mat[i][j]==X)

count=1;

}

}

if(count==1)

cout<<"1";

else

cout<<"0";

return 0;

}