

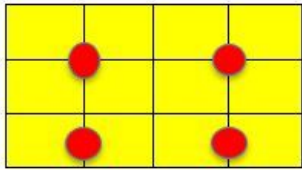
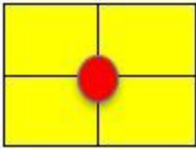
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1 Mine Clearer

The game of Mine-clearer has a checkerboard, with p rows and q columns. Each box contains a mine. Clicking on the board at a point marks it with a red dot. If a box contains at least one red dot inside or on the border then the box is considered cleared of mines.

Given p and q. What is the minimum number of clicks/dots that one must make to clear all boxes of mines?

Input/Output

Input	Output	Comments
3 4	4	Input Format Two integers with space-separated, indicates p and q values Output Format An integer, denoting the minimum number of red dots one needs to make. Explanation: Given p=3 and q=4,  1 red dot placed at intersection point of four mines 1 red dot placed at intersection point of four mines 1 red dot placed at intersection point of two mines 1 red dot placed at intersection point of two mines Total of 4 Red-dots required.
2 2	1	Explanation: Given p=2 and q=2,  1 red dot placed at intersection point of four mines Total of 1 Red dot used.

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2. Lucky Match

Anna has invented a new game to play with her kid/younger brother. She writes a secret string in her book, then her brother writes a string and gives it to her. She will now shows her string to her brother and they both will compare and count the number of alphabets/characters (K) in her string match with the characters (T) in her brother's string. Assuming Anna makes sure that her string has distinct characters, can you help Anna and her brother in finding the count?

Note:

-- Letters/Alphabets are case sensitive, so 'a' is different from 'A'.

Constraints:

-- T and K will consist of characters/letters and have length at most 50.

-- The characters/letters in K are distinct

Input/Output

Input	Output	Comments
bBEAR bBBccc	3	Input: Line 1 → contains Anna's String (K) Line 2 → contains Anna's Brothers String (T) Explanation: As K and T - Fulfills all the above mentioned constraints like i) T and K will consist of characters/letters and have length at most 50 ii) The characters/letters in K are distinct So the count of matching characters of K with T is 3 → output i.e K = bBEAR T = bBBccc
GOD good	0	Explanation: As K and T - Fulfills all the above mentioned constraints. So the count of matching characters of K with T is 0 → output

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xerr xerox	-1	Explanation: As K does not fulfilled the below mentioned constraint -- The characters/letters in K are distinct . K = xerr output → -1
e8R# Hello	-1	Explanation: As K does not fulfilled the below mentioned constraint -- T and K will consist of characters/letters and have length at most 50. i.e K → contains other than letters K = e8R# output → -1