Army Game



Luke is daydreaming in Math class. He has a sheet of graph paper with n rows and m columns, and he imagines that there is an army base in each cell for a total of $n \cdot m$ bases. He wants to drop supplies at strategic points on the sheet, marking each drop point with a red dot. If a base contains at least one package inside or on top of its border fence, then it's considered to be supplied. For example:





Given n and m, what's the minimum number of packages that Luke must drop to supply all of his bases?

Input Format

Two space-separated integers describing the respective values of n and m.

Constraints

• $0 < n, m \le 1000$

Output Format

Print a single integer denoting the minimum number of supply packages Luke must drop.

Sample Input 0

Sample Output 0

1

2 2

Explanation 0

Luke has four bases in a 2×2 grid. If he drops a single package where the walls of all four bases intersect, then all 4 cells can access the package:

