

THE ACM-ICPC 2016

VIETNAM SOUTHERN PROGRAMMING CONTEST Host: University of Science, VNU-HCM

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Problem I Meeting Rooms Time Limit: 1 second

Central Hall is a crowded building complex for various scientific and technological meetings and social activities.

Traditionally, to prepare for an event, we need to manually deliver chairs to various workspaces, then organize chairs around the meeting table in each workspace.



Luckily, Central Hall is equipped with smart chairs. With smart localization and mobility module, a smart chair can automatically move between workspaces and arrange itself in each workspace.

You notice that if you organize a meeting with n chairs for a workspace, there is at least one extra chair. The same phenomenon occurs if the number of chairs for a workspace is m, s or t. However, if each workspace needs p chairs, all chairs will be used.

Please determine the minimum possible number of chairs in Central Hall.

Input

The first line of input contains four integers: n, m, s, and t, separated by spaces (1< n, m, s, t < 10⁴). The second line of input contains one integer: p (1< p < 10⁴).

Output

Display a single positive integer that is the minimum possible number of chairs in Central Hall.

Sample Input

Sample Output

8 6 12 17	4081
11	