

Factors

memory limit: 8 MB

time limit: 1 s

Find multiplying factors of the given input n .

Input

Line 1: an integer n ($1 < n \leq 1000$)

Output

Line 1.. k : If the number of multiplying factors of n is k , each line contains a multiplying factor of n in order from the minimum to the maximum.

Example

Input

24

Output

2

2

2

3