Lab 05 Tasks

Q1. The Hollywood Boulevard is one of the most famous streets in the world which has a rectangular shape of *m x n* meters. Recently the mayor of California decided to pave the square with square granite flagstones. Each flagstone is of the size $a \times a$.

Your job is to help out the contractor who got the job of paving the street by finding out the least number of flagstones that is requires to cover the entire street. You can cover more space than the actual street space but no space of the street can be left uncovered. The sides of flagstones should be parallel to the sides of the Square.

Input

The input contains three positive integer numbers in the first line: *n, m* and *a*

Output

Write the needed number of flagstones.

Example

input
6 6 4
output
4

Q2. A **Funny Number** is an integer such that the sum of the cubes of the digits of the number is equal to half of the number itself. For example, 305 is a Funny Number since $3^3 + 0^3 + 5^3 = 152$, which is half of 305. Your program will take two integer values *n* and *m* as input. It will then print every Funny Number between *n* and *m*.

Q3. Write a program using an iteration statement which will take an input of integer **n** repeatedly until n is a prime number. Prime numbers are the integers that can only be divided by 1 and the number itself. For example, 13 is a prime number. So is 2. But 8 is a non-prime number.

Q4. Write a program that will continue taking single characters as input from the user until the user presses '0' (zero). The program will now print how many vowels and consonants were typed by the user. You must consider both uppercase and lowercase letters.

Q5. One hot summer day Pete and his friend Billy decided to buy a watermelon. They chose the biggest and the ripest one, in their opinion. After that the watermelon was weighed, and the scales showed *w* kilos. They rushed home, dying of thirst, and decided to divide the berry, however they faced a hard problem.

Pete and Billy are great fans of even numbers, that's why they want to divide the watermelon in such a way that each of the two parts weighs even number of kilos, at the same time it is not obligatory that the parts are equal. The boys are extremely tired and want to start their meal as soon as possible, that's why you should help them and find out, if they can divide the watermelon in the way they want. For sure, each of them should get a part of positive weight.

Input

The first (and the only) input line contains integer number w ($1 \le w \le 100$) — the weight of the watermelon bought by the boys.

Output
Print YES, if the boys can divide the watermelon into two parts, each of them weighing even number of kilos; and NO in the opposite case.

Input
8
Output
YES