Celebration

Its new year's eve Demitry and Raul are celebrating together at Raul's. An equation popped up in Raul's head by which he can measure if Demitry is enjoying the night. Raul claims that the equation is accurate and wants your help in determining if Demitry had fun with the celebration or not. Dimetry will give you a floating point number n take the integer part of it (let this x) and multiply it by 7 and let this A. Demitry will give you another number k (integer this time) and let B is the square of k .if x+1 was even and A+B was less than or equal to 100 then you can say that demitry was happy celebrating with Raul.

Input

n Floating point number

K >=0 Integer

Output

One line with 1 if Dimetry was happy 0 otherwise

Example

Input:
15.6 5

Output:
0

Hint: A = 105 B=25

Input:

12.1 3

Output:

0