

# Beer shopper 2

(See *Beer shopper* for full introduction)



It turns out giving away beer for free is a great way to get new friends! Greg has made so many new friends he has trouble keeping up with demand.

Luckily he has a friend working in a brewery, who has come up with a deal where Greg can buy beer in bulk. The beer from the brewery comes in boxes with 198 beers.

As before Greg wants to share exactly one beer with each of his friends, without having any excess beer (which will lead to fighting). Write a program that determines whether it is possible to buy beer from the brewery in such a way that each of his  $f$  friends get exactly one.

Note that this time Greg has got *really* many friends.

## Input

Input consists of a single line with a single integer  $f$ , the number of friends Greg wants to buy beer to.

## Output

If it is possible to buy a number of boxes such that there is exactly one beer for each of Greg's friends, simply output **BEER!**. Otherwise output **FIGHT!**.

## Constraints

$$0 < f \leq 10^{10^6}$$

## Sample input 1

100

## Sample output 1

FIGHT!

## Sample input 2

198

## Sample output 2

BEER!

## Sample input 3

297

## Sample output 3

FIGHT!