Mod

Gon and Killua is playing rock,paper,scissor game. Now they are bored with the traditional rules.

So, they think to change the rule. Each of them will say a number in lieu of using finger .

Let, a number is x. if x%3==0, it means ROCK

if x%3==1, it means PAPER

if x%3==2, it means SCISSOR

The rest of the rule are same,

for ROCK and PAPER, PAPER will win,

for ROCK and SCISSOR, ROCK will win and

for PAPER and SCISSOR, SCISSOR will win.

And if both of them are same, it will be a DRAW.

Input

Input starts with an integer T, denoting the number of test cases.

Each case contains two integers X(Gon's number) and Y(Killua's number)

1<= **T** <=100000 1<= **X,Y** <=100000

Output

For each case, if Gon win, print "GON",

if KILLUA win, print "KILLUA" or if it is a draw, print "DRAW".

Example

Input:

3

0 1

10

33

Output:

KILLUA

GON

DRAW