Problem 13: General N-M size die hard jug problem.

Note:

$0 < M < N$

Start

M
N

$$gcd = \frac{M * N}{(M, N) \, LCM}$$

$gcd = 1$

No → You can extract only multiples of M to N

Yes → you can extract any number of water litre from M to N

Stop
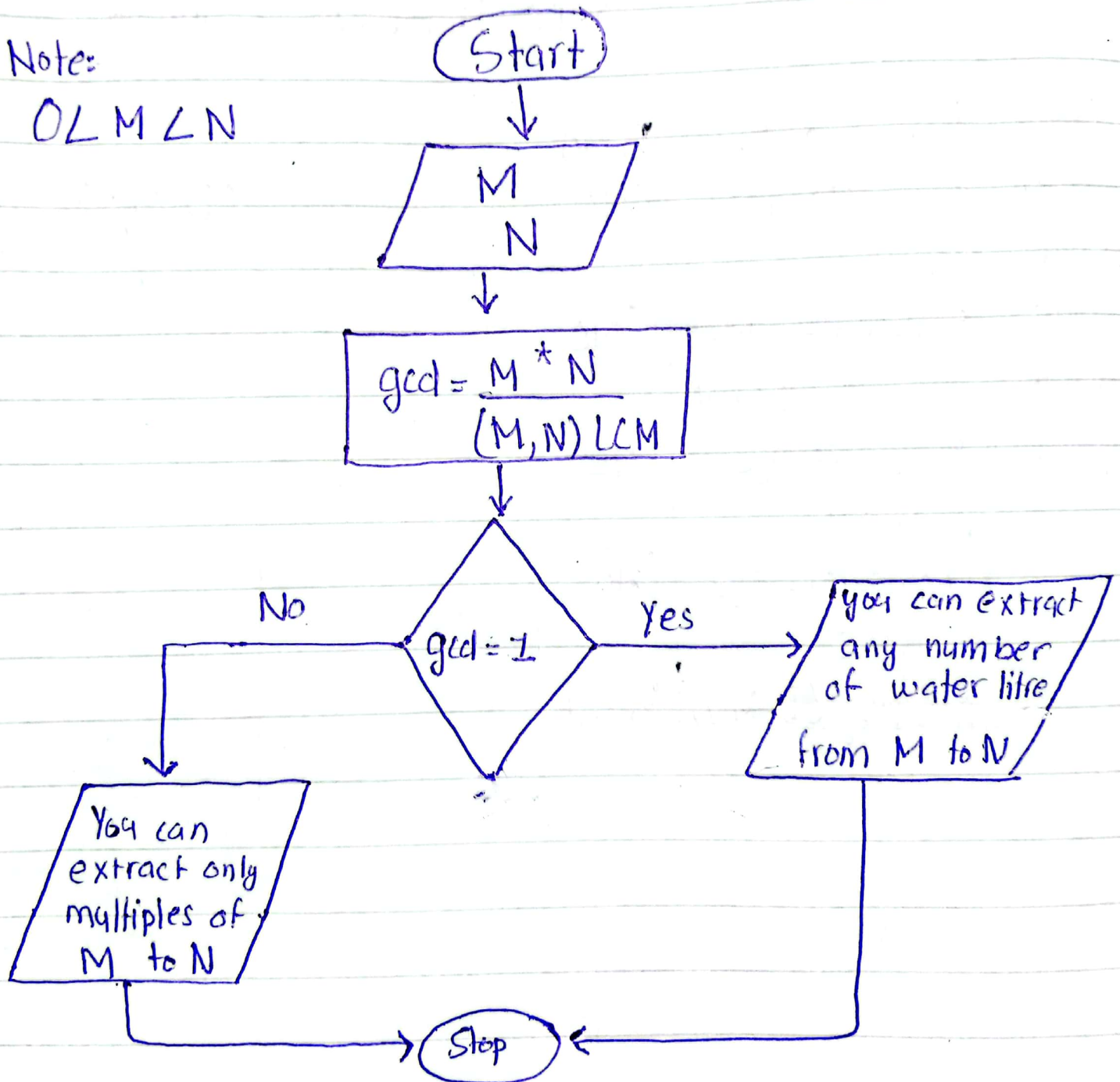
Pseudocode:

- Start.

- // Take Input, Remember $0 < M < N$

    Enter M jug value

    Enter N jug value

- // calculate gcd

$$gcd = \frac{M * N}{(M,N)\ LCM}$$

- // conditions

    if $(gcd = 1)$

    Print " You can any number of water litre from M to N."

    else

    Print " You can only extract multiplies of M litres to N."

- End.

IPO:

Input	Processing	Module Preference	Output

M
N
	• Start
	• Input M, N
	• calculate GCD
	  Determine
	  whether multiplies
	  of M will
	  be extract or
	  all from 1
	    to N
	• Print "litres"
	• End
		Read
		Calc
		Calc
			litres
			that can
			be extracted.