

→ The part of our program that executes the same instruction again & again until a condition is met is called a loop.

Print 1 → 20 in reverse order

20 19 18 2 1

1 → 20

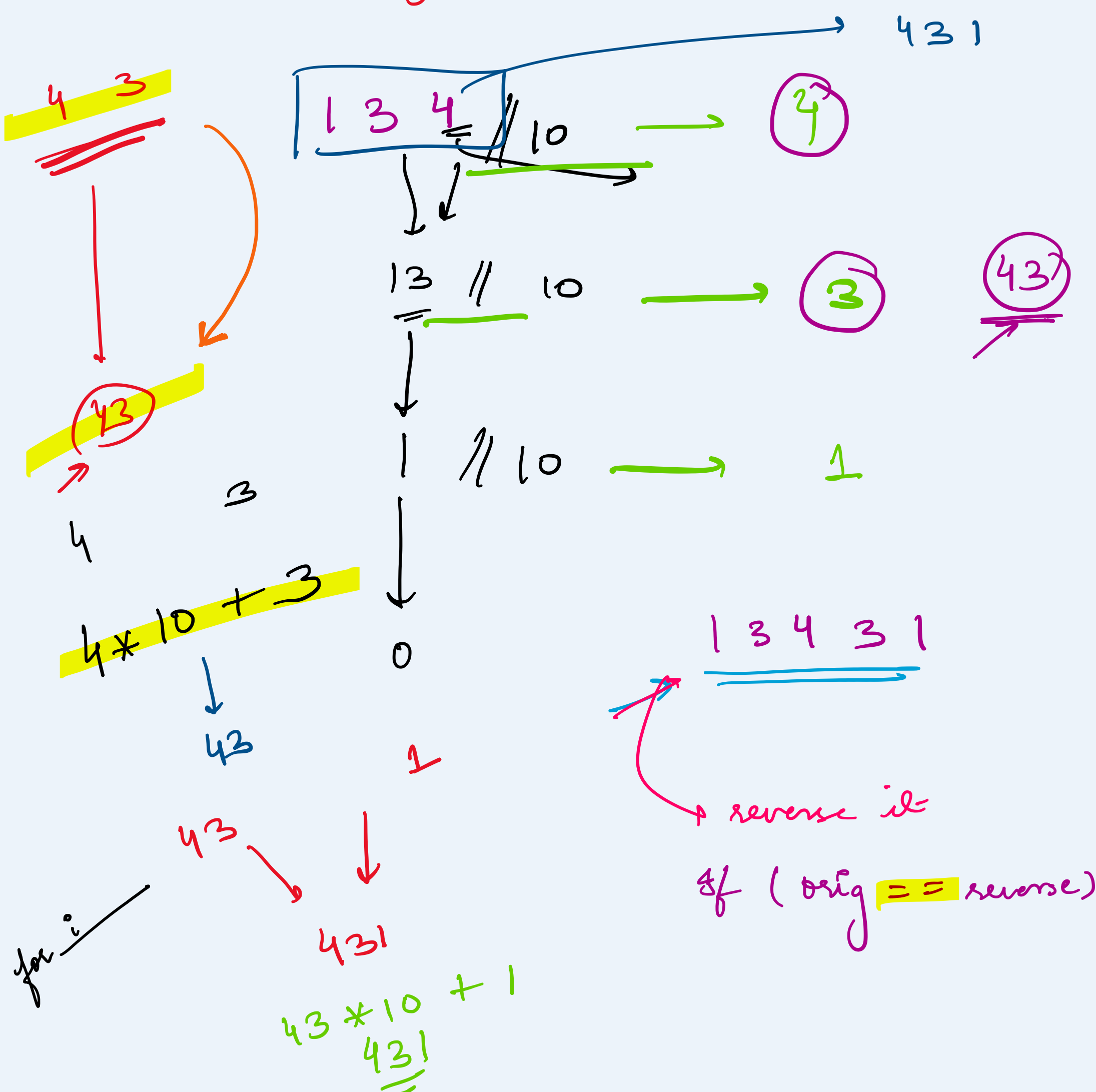
$i = 1, j = 40$

print(1)

$i = 2, j = 39$
 $i = 3, j = 38$
 .
 .
 .

print(i) → 2

$i = 19, j = 21$
 $i = 20, j = 20$

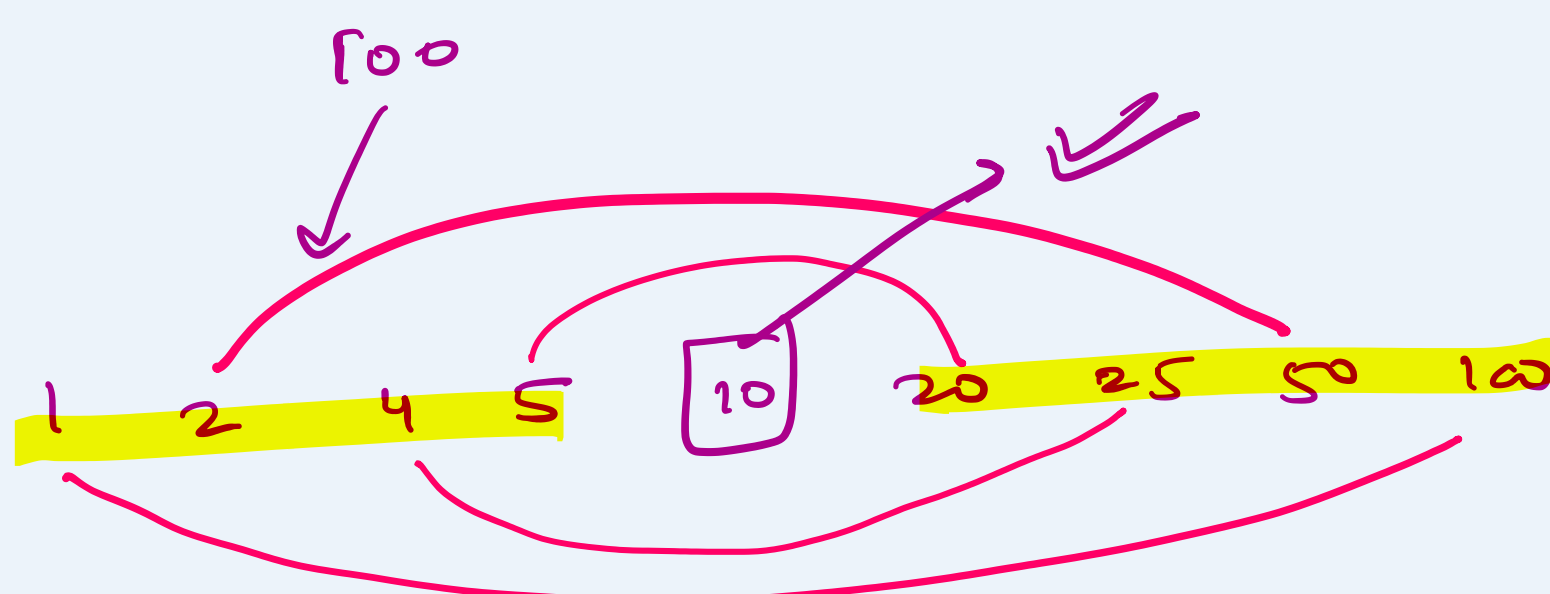


Factors

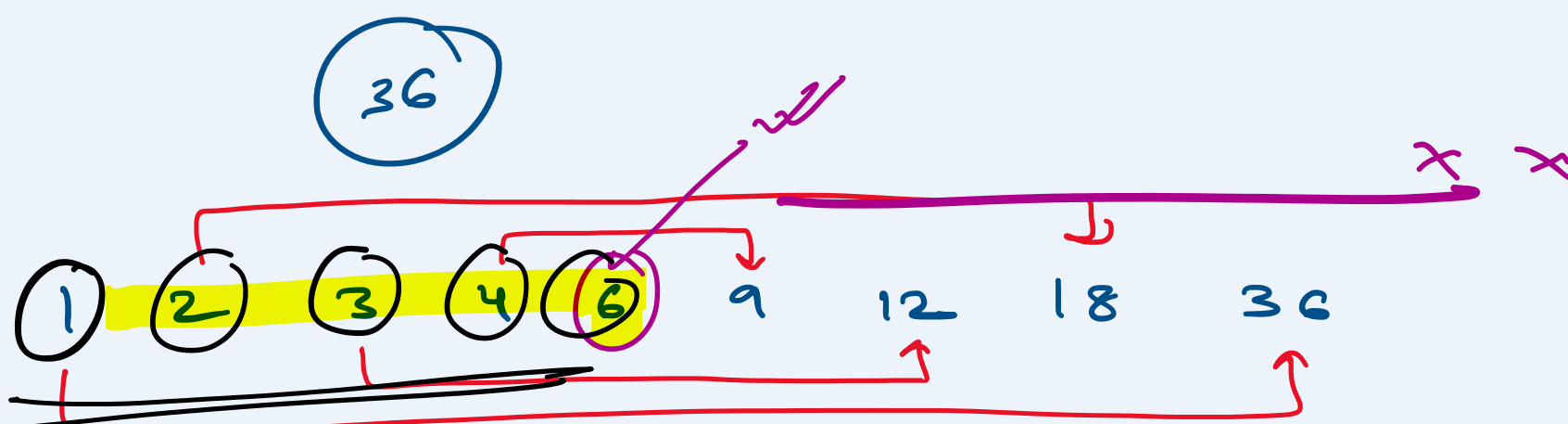
1. Run a loop from 1 to N.
2. For every no's, we keep dividing N by it. If N is divisible by that no, (remainder is 0), we print that no.

Prime number

1. Run a loop and keep dividing all numbers from 2 to $n-1$.
2. If the no. is divisible by any of the no's, then it won't be a prime no.



* A non-prime no, should have a factor b/w 2 to \sqrt{n} .



Nested loops are 2 dimensional.

→ The inner loop indicates how many times we want to run a piece of instruction

→ The outer loop indicates how many times I want the inner loop to execute.