

$$\text{gcd}(a, b) = \text{gcd}(b, a \% b) = \text{gcd}(a \% b, b \% (a \% b)) \dots \text{and so on}$$

if  $(a > b)$

new weight for second param  
to become 0.

when it does become 0,  $\text{gcd}(x, 0) = x$ .

$$\begin{aligned} \text{gcd}(12, 10) &= \text{gcd}(10, 12 \% 10) \neq \\ \text{gcd}(10, 2) &= \text{gcd}(2, 10 \% 2) \\ &= \text{gcd}(2, 0) = \textcircled{2} \text{ / ans.} \end{aligned}$$

```
func(int a, int b)
    if a < b
        func(b, a).
```

```
    if (b <= 0)
        return a
    else
```

