a = "12345", b = 7 say.
(a%b)

Now to calculate we can start like this

((0*10)+1)%.7 = 1%.7 = 1

→ ((1*10)+2)%.7 = 12%.7 = 5

→ ((5*10)+3)%.7 = 53%.7 = 4

→ ((4*10)+4)%.7 = 44%.7 = 2

→ ((2*10)+5)%.7 = 25%.7 = 4

which is correct as 12345%.7 = 4

Thought process:-

① we can write 1 as 1 and take 1%.7 = 1 and 1%.7 = 1

② we can write 12 as 10x1 + 2

(10*1+2)%.7 = (10%.7 x 1%.7 + 2%.7)%.7

= (3x1+2)%.7

= (3+2)%.7 = 5.

③ we can write 123 as 12*10 + 3.

123%.7 = ((12%.7)x(10%.7)+(3%.7))%.7

= ((5x3)+3)%.7

= (15+3)%.7 = 4.

④ 1234 can be written as 123x10 + 4.

1234%.7 = ((123%.7)x(10%.7)+4%.7)%.7

= ((4x3)+4)%.7 = 2

⑤ 12345 can be written as 1234x10 + 5

12345%.7 = ((1234%.7)x(10%.7)+5%.7)%.7

= 4

target

So as you can see that value calculated on a lower step is used on next step.