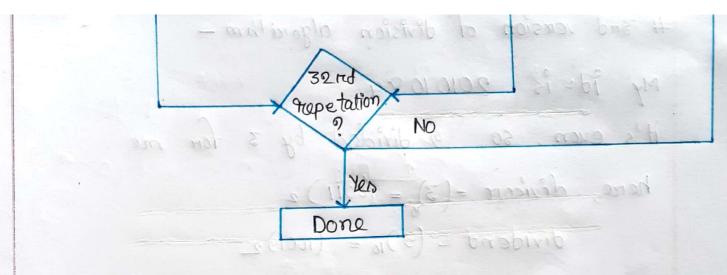
# 3nd version of division algorithm -My id is 2010 10 84 it's even, so, 9 divided by 3 for me herre, dévisoir = (3) = (0011) 2 dividend = (9)10 = (1001)2 now, Algorithm - to lod the still the war stard Aide Ad ad 1. lest shift the Reminder Register I bit 2. Subtract the divisor Register from the left half of the Reminder Register and Place the Result in the last half of the Reminder Rogister. Remainder 20 Remainder Remainder CO 36. Adding the Divisor 3a. Shiff the Romainder to the let setting the new Register to the Remainder Registers and place the sum reight most sig. bit to 1. In Romainder Loft shift Remainder set least sig. 64 to 0.



now, let, LHR = left half of Remainders

RMB = teight most bit

L5 = left shift

RS = reight shift

Divisor = (3) 10 = (0011)2 Dividend = (9) 10 = (1001)2

+		The state of the s		
	oteration		Divisor	Reminder
-	0	9nitilization	0011	0000 1001
		1.1 bit LS of Remainder	edete Reg	000 1 0010
	1		0011	
		2. LHR = LHR - Divisor	0 / OK 50	1110 0010
		36. LHR = LHR + Divisor	nes	0001 0010
-		15 of Reminder and		
	DEASCRE	set RMB to 0	of against	0010 0100
	2	2. LHR = LHR - Divisor 3b. LHR = LHR + Divisor Ls a Reminder and set RMB to 0.		000 1000

9 tercation	Steps	Divisor	Remainder
3	2. LHR = LHR - Divisor -		±0001 1000
	3a. Ls of Remainder - and set 12M13 to 1.		>0011 0001
4	2. LHR = LHR - Divisor. 3a. Ls of Remainder and set RMB to 1.		>0000 0001

here afters the 4th iteration, the

given, 
$$9 \div 3 = 3 = (0011)_2$$
  
no Reminder, so,  $0 = (0000)_2$ .  
[Proved]