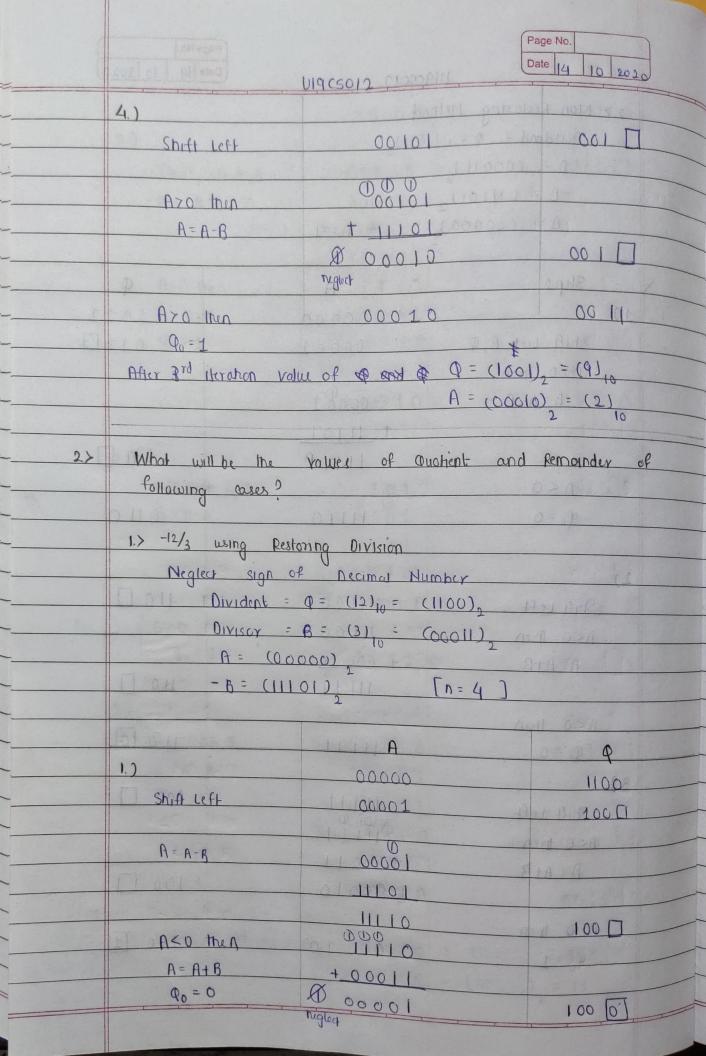
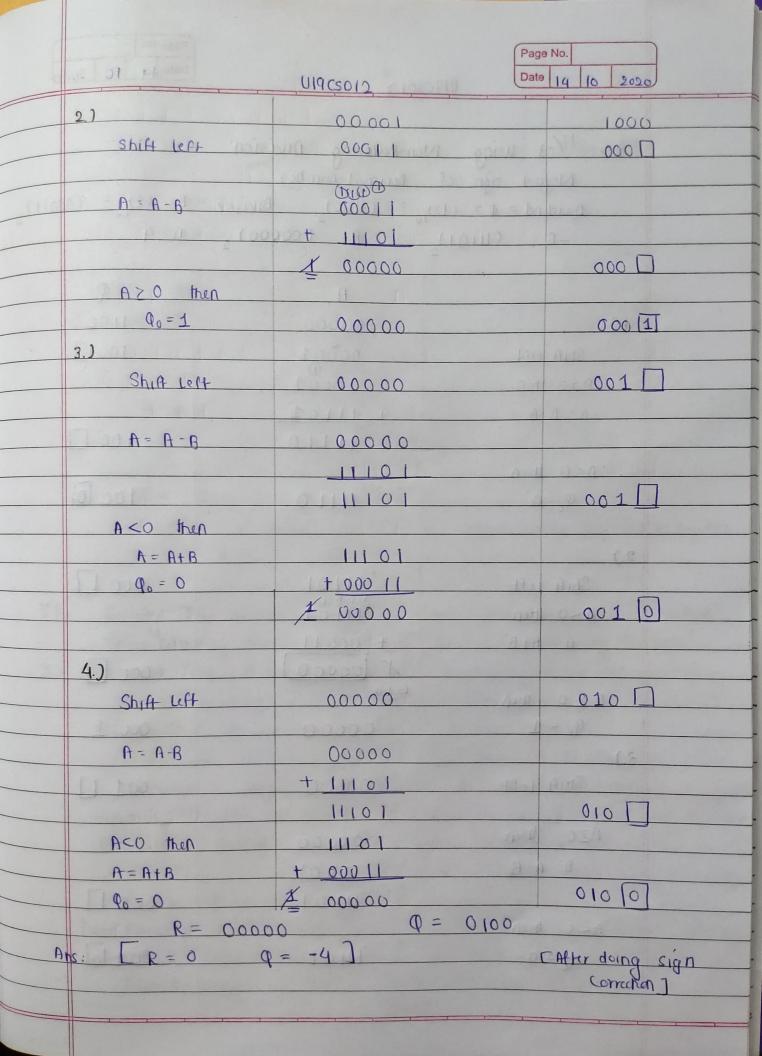
DIVISION TUTORIAL

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	A H AC - S I S I S I S I S I S I S I S I S I S	Thomas .	
1.7	Criven Dividend = 11 and Divisor = 3, what will be value of		
	and A at the end of 3rd iteration for following		
		511 3 S g	
	1.7 Restoring Division Method		
	2.7 Non-Restoring Division Method		
	U		10-9 0
1.>	1.> Restoring Division Method		+A: A: 1 A 1 A 1
	Dividend = $Q = (11)_{10} = (1011)_2$ complement of B Divisor = $B = (3) = (00011)_2 \Rightarrow B-minus$		
	10 2		1101)
	n = 4 iterations		TOCAL
	II note to to page		101 11-112
	skps	L A	9
		101111	
		00000	1011
	1 Shift Left AP	000012	
		00001	0110
	1 A= A-B	10001	S. A. P. L.
		00001	
		+11101	(A)
	TI, KABI	11110	011
		1188	Ach
	A<0 then	11110	
	A = A+B	+ 00011	
	Q0 = 0	1 00001	011 0
	HE SO	reglect	1
			(do=0)
	160 = 1000 = 1	In east makes he	Contract of the contract
	(00) = (00)00) = 1		

	CH sqc5		Page No. Date 14 10 2016
	pend of misso, Tala	UJ9CSQ12	Date 14 10 2010
		00001	0110
40 201	2.)	Thomas Hand Hand	had asia let
•	Shift Left A, Q	00010	9 600 1100
	A = A - B	00010	
		+11100100101111	niconal Ch
	H		10 II Man Per
	A<0 then		
	A = A + B	+00011	STREET REGISTER
	Qo = 1	1100010	1100
	- 8 Po to militario	neglect : " The sp	= Kabwill
	oann A ska	00010	= 100
	: (1911) =		appar = A
	3.)	Tendal	H A CAN A CAN
	Shift Left A, Q	00101	100 🗍
	0 A = A-B	00101	3943
		+ 11101	
	10111111111111	M00010	
		neg. 00010	100 0
Ansi	7110A70	10000	
	Po=1	00010	1 00 1
		15000	
	4.)	15111 t	
	Shift Leff A, Q	01100101	001 0
	A = A - B	00101	
		+1111101	al OPA
		1 00010	and 001 1
	0 110 10	10000 [1]	D = 10
	Ceo = 1	00010	00 1 1
(0)	010)		
	Ans: After 3rd Heraty	on, Value of q = (100	$(1)_2 = (9)_{10}$
		Valu of A = (000	
			2





	1561	TANKA TANKA	10
	2> 12/-3 using No	on-Reltoring Division	msi ogip
	Neglect sign of	Decimal number	
	Dividend = 0 = (12)	= (1100) Divisor	$= 8 = (3)_{10} = (00011)_{10}$
	-B = (11101)	A= (00000)	n=4
	Loon i	20529 }	
			P
	11.)	00000	1100
	Shift Lift	00001	1000
	DATO then		
	A = A - B	+ 11101	
		00011110	1-A-100 []
	A<0 then	12111	
1	Q = 0	10111110	100 0
			not on the
	2.)		n 11 = 1
7	Shift Left A < 0 then	11101	000 🗍
14	A<0 then		
	A = A+B	+ 00011	
	The same of the sa	X (00000)	000
	AZO then	Negleo	DJ 4112
	$\varphi_0 = 1$	00000	000 1
	3.)	20200	an Alder
	Shift Left	00000	001
	AZO then	10101	
	h A-B	00000	1 00A
		111101	A+H=A
	01010	11101	001 1
	ACO then 010	UGAGG	19
	Q ₀ = 0	11101	0010
	Amia Amia Amia		
1300			

	[Marcon]		Page No.	
		Ulgesola	Date 14 10 2020	
	4.)			
	Shift Left	*11010	010 🗆	
	A<0 tren	11010		
	A = A+B	+ 00011	A	
		11101	010	
	A < 0 then			
	Q0 = 0	11101	0100	
		Wire (D		
	if A<0 tren	1110 I		
	A = A+B	+ 00011	0100	
		₹ 00000	0100	
		A 1 a -		
		0 = 0100	the thee CO will be people!	
	I've know if divident or divisor negative then Q will be negative. $R = Q = -4$			
	K=0	4- 4		
3.>	Tuch G. the Statement	nt with proper &	easoning method"	
0.7	"Non-Pestaring Division	on method is faster	then Restoring Division?	
3.>	In each step of div	ision calculation the res	out of the step is either	
	In each step of division calculation the result of the step is either 1 or a depending if dividend is less than / larger than divisor			
	You generally do a	test subtraction for each	h step (quotient)	
	You generally do a test subtraction for each step (quotient) if result is possitive or zero: => note down 1 as not digit of quo			
	if result is negative: => Proceed with one of two strategics: (digit)			
	Restoring Method: W	Restoring method: We add the divisor back, and put a as next constrent		
	Non-restoring Method: We keep negative remainder, and a digit 1			
	and basically correct things by a supplementary			
	addition efterwards			
	Non-Restoring is faster (max n+1 steps for n digits) wherelse restoring			
	method (which is ma	ore natural needs up	to 211 steps 1. So,	
	Non-Restoring is	faster than Resto	The Melhod.	