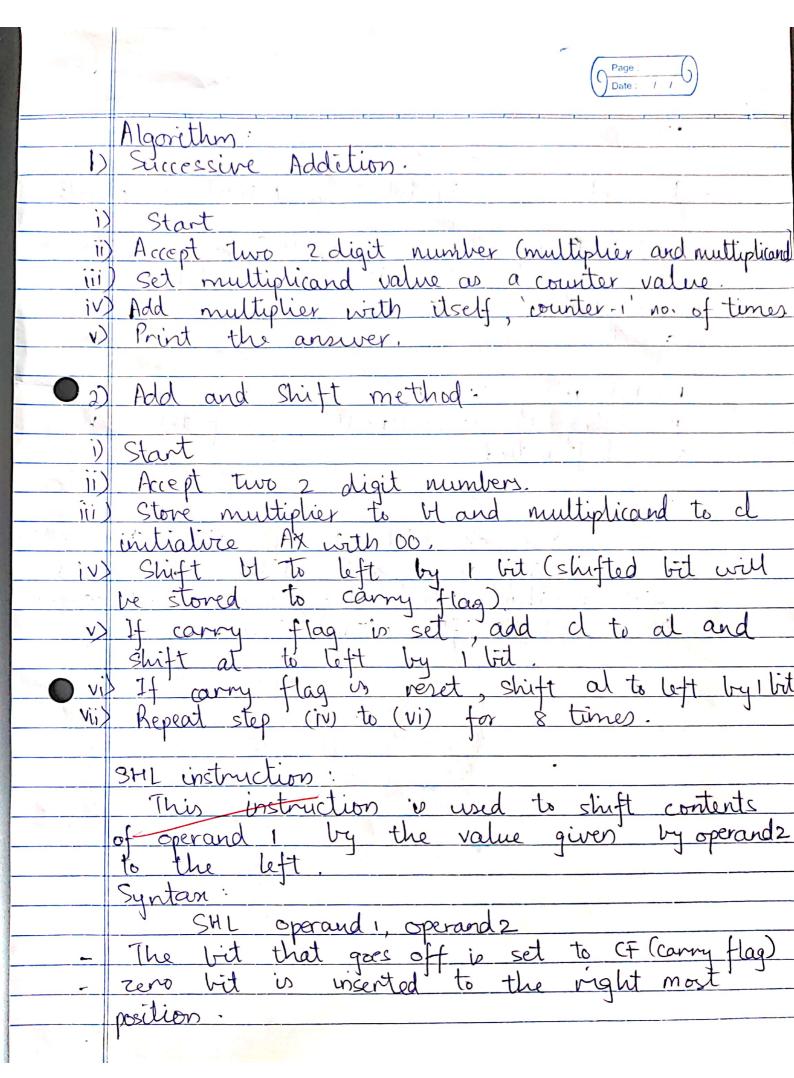
	Assignment-y
1	the specific to the second of
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4	Title: write x86/64 ALP to perform muliplication
à.	of Two 8 bit heradecimal mumbers. Use
UMU	Title: write x86/64 ALP to perform muliplication of two 8 bit hemadecumal members. Use successive additions and add and shift method.
4	Objective: To understand following multiplication techniques in ALP Successive Addition:
- E	techniques in ALP
(i •	Successive Hadition:
ii	Add and Shift method.
25 01	Outcome: Students will be able to do multiplication in ALP.
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	Theory: Successive Addition method:
1)	Successive Addition method:
	Consider that a byte is present in the al register and second byte in bl register.
wh	al register and second byte in bl register.
	We have to multiply the bijle in AL with the
1	byll in M.
(ii	We will multiply the numbers using successive
4.4	addition method.
ni	and other number is taken as a counter. The
F	and other number is taken as a counter. The
	first number is added with itself till
107	the counter decrements to zero.
vi	Result is stored in dn register. Display
	the result, using display voutine!
	AL-05 M BL=04M.

2) Add and Srift method: Consider that one byte is present in the by negister we have to multiply the we will multiply the numbers using add and shift method. In this method you add number with itself and rotate the other number each line and shift it If carry is present add the Two numbers.

Initialize the count to 4 as we are each time the bits are added. The result is Display the result · MUL instruction, This instruction is used to multiply unsigned numbers when operand is a byte of AX = AL - operand when operand is a word. (DXAX) = Ax + operand. In modern computers (bu bit): when operand is a word: ear = an + operand.
ashen operand is a double word when operand is a guad word (RDXRAX) = RAX* operand.



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	Date: / /
	Test (ases:
	Description Expected Actual Result
	Multiply 1h by Ans Same as Pass 10 using = 0120 H expected
-	Multiply 12 by Ans Same as Pass 10 using = 0120 H expected
	successive
	addition
	Multiply 11 by Ans Same as 10 using add = 01120 H expected Pass
	10 using add = 01130 H empeded Pass
	and shift method
	The state of the s
1	Conclusions:
	we are able to multiply two idigi
	notis using successive addition and add & shift method. We also learnt about carry
	Shift method, we also learnt about carry
	Hag and shift instructions.
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