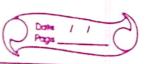
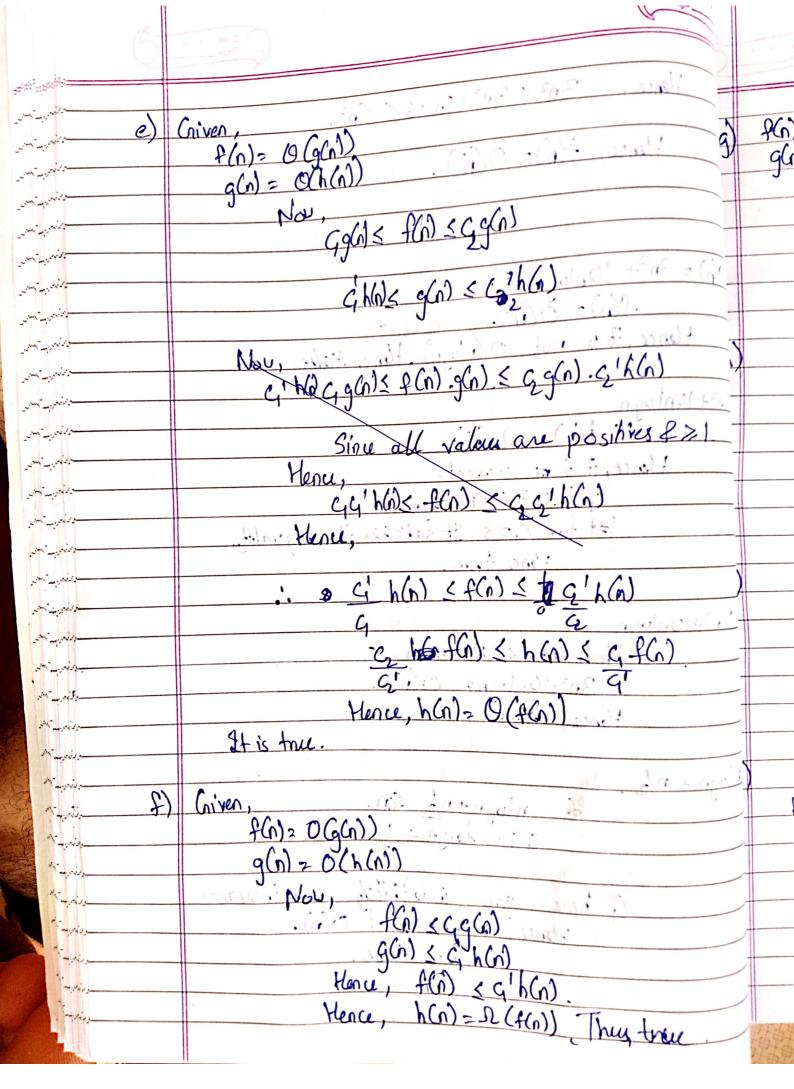


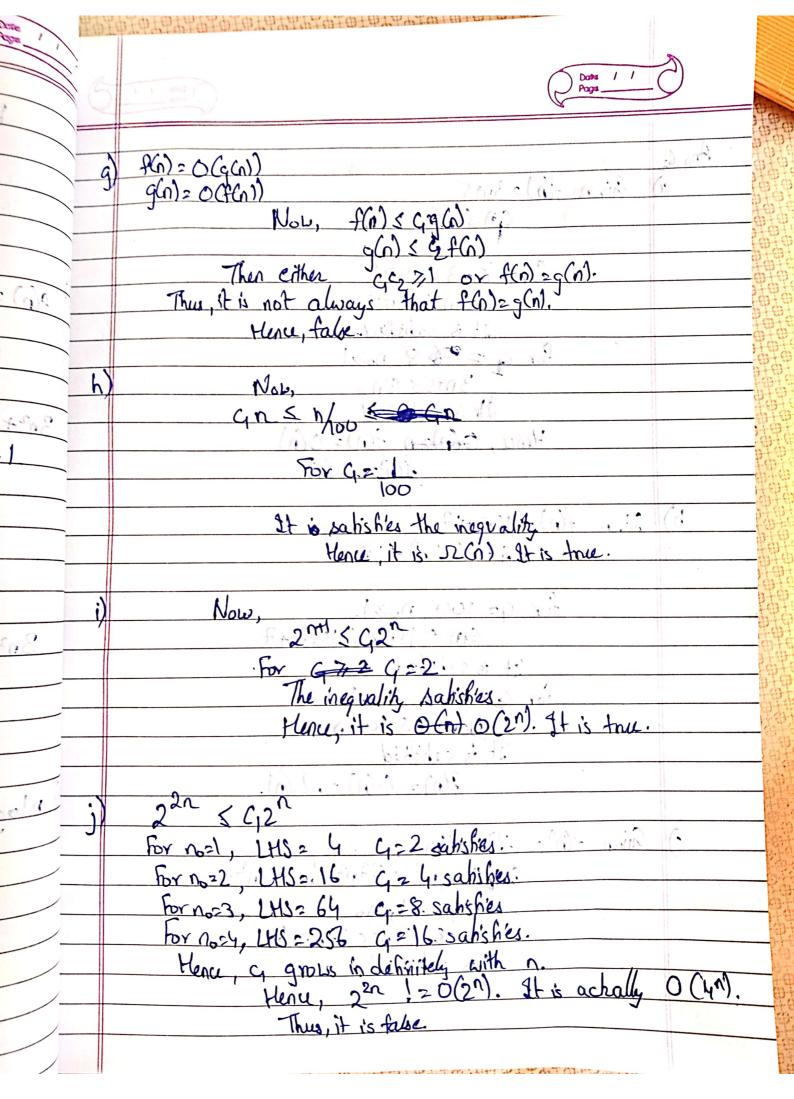
=		
-	DAA Tutorial 200 - (6). sound le se	4
9		
	1: Given f(n) = 3n2+4n-2:	
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
41	$3n^2+4n-2 \le 4n^2$	
1,_	Here for G=5 145= & n,21,	
	LHS 2 5 RHS 25	
	for $n = 2$	
	LHS=30 RHS=20	
	Thus, for G=6 it will sahishy.	
	For n=34-G26	
	HS=27+12-2=37	
-	RHS= 9x6-259: 50 , 74:	
	Hence, & 426 & 17 No 22	
	302+6n-2 5 602.	
	Thus, it is o(n2)	
	1 2 2 3 1 3 2 5 1 2 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1	
2;	i Given f(n) = n3 (lip) 0 . Por part	
	; Given $f(n) = n^3$ (iii) $\frac{1}{2}$ (iii) $\frac$	
	for no=1, G=1 sabstres it.	
		anh.
	For no=3, G=3 sahiba it	
	AS G 7 (0) 0 10	
	Hence, G is gnowing indefinitely.  Hence, G no 1 a 1/2	
	Henro Ding 1 A/21	
	Hence, 5 n3 1 = 0(n2)	
	State That have been a supplied to the	
	E CLONE WILD WAY OF DELLE	
	0.55.54105.6.05. 4 cp.,	
	2501 100 100	

and the second	Ams 3:	Given $f(n) = 3n^2 + 5n + 6$ g(n) = $n^2$ yet $f(n) = (-1)^2$
igniz-		30-7311
mi agrida		Here pitor 100 3
the myster.		Call sabiles it.
	8	for no 22,
alai aykid alai aykid		C12 6 Sanstie :
wind any policy		LYS = 27+15+6=48.
- Languiga		Manua 1002 2 - 2 - 2
alter anglis z		for $\forall n_0 = 2$ ; $3n^2 + 5n + 6 \le 6n^2$ $\forall ence, \forall (n) = 0 (g(n))$
ale de la compania d La compania de la compania del compania de la compania del compania de la compania del compania de la compania del compania de la compania del compania		Yence, A(n) = 0 (g(n))
- روزور در میرود - وازور در میرود		1. Given A(n)= 31775 nt6 ,9 (n)=12
2007 - 2013 - 2017 - 2017 - 2017 - 2017 -	Ans (	1: Given H(n) = 317+Sn+6, 9 (n) = 15
The second		Gn <sup>2</sup> (fo) (G n <sup>2</sup> .  For a this histing vality.  Gn <sup>2</sup> (30 <sup>2</sup> +50+6.
m - year		For A= 14 G= 13.
	,	the above inegrality sahabes-
	ر ر	For A= 1 4 4 3 3.  The above inegrally sahabes-  Note, 3n2+5n+6<6n2  For G=6 n>2  3n2+5n+6<6n2
	%	311 131110 \ 5n.
	714	

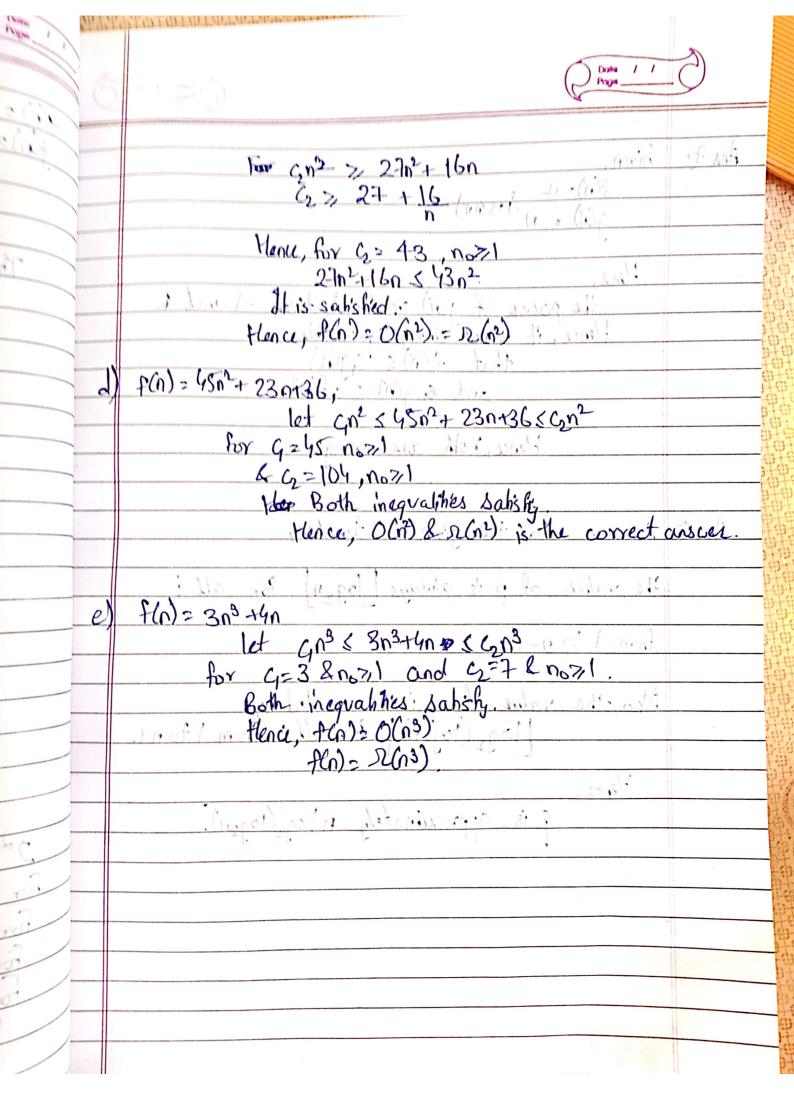


6	Dotte / / Pagus	$\bigcirc$
	Hence, 3n2 < 3n2 +5n+6 < 6n2.	(0)
	Hence, $f(n) = O(n^2)$ .	
	flence, T(n)=O(n).	
	10,020,00	
Ans 5		
4)	P(n) = 3n2+ 10nlogno (1)	
	$f(n) = 3n^2 +  Onlogna $ $-f(n) = O(n^2).$	
	Hence, it is not O (nlogn). Hence, false.	
	(a) 1 (a) 2 (a) 2 (a) 3 (b) (b) 3 (b) 4 (b	
b)	3n2+10nlogn	
	16 S 16 + (n) 2 2 (n2). No mil	
	Hence, it is a correct.	
	Cinzis 3n2+tonlogni	
	tet for G=3, It sah's her the inequality.	
	Hence, true.	
	302+100logn	
-9	Ennahar 2 cares	
	3n2+10nlogn2 O(n2).	
	1 3n2+10nlogn 2 O(n2). Hence, true.	
	. 110 2: 1:	
d)	$n\log n + n/2$	7.0
	for nlogn+n/2 sin.	1.
	of mognature squ.	
	G here grows indefinitely as of incleases.	
	Hence, mlognit no + O(n).	
	4 here grows indefinitely as minimuses. Hence, misgin + np & O(n). Hence, false.	
	. (((0 0 ) ) (0 ) (1 ) (1 ) (1 )	
	113 th xive , ((10)x) 32 . (10)x , x 22	





		1 1 2
All lines		
Aug		
Ans 6;	Given Ha)=3n+5  Given Ha)=3n+5  Given Ha)=3n+5	
. winiza	0.11	
- Series	13053015	
	S Dozi	
	Br G = 8 noz	Pa
	It is eatisted	
wini		
	Hence, Gent of Colors	
	Given fln)=100n+7-11-12-12-12-12-12-12-12-12-12-12-12-12-	Miles
b)	Given fln)=100nt++  Gn: Sfln) & Con	
· · · · · · · · · · · · · · · · · · ·	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	f
	for 42 100, no71.	-
	GA (00% (100 h.44)	
	It is salished.	
~ - ~ J	for C22407, 1021	-
K-112	It is satisfied.	
*	fln/2 O(n) 2 D(n).	
	1941/2 OUI) 2B2(11).	·
	Given flat 2 2th 2th	· -
	GARA: Gn2 < 27n2+16n 3 Cm2.	
	Par G = 27. no 21	·/
1 mais	527n2 < 27n2+16n	シ
	It is sanished a starp in	/_
(1.11)	Made 2 to 12 11 the collade D	
	This it tirent	



the American Control of the Control	W POOR
<b>1</b> 11 6 E	
	200 35 200
A 2	1
Ans 7.	Given, f(n)= n (1+5 inn)
	C(0) = 1
	Here,  the pour of g(n) varies betiern -1 and 1.  Hence, it is not always possible  that $f(n) \leq C_1g(n)$
	Here, 1 2(0) varies benices - Cara !
	the pour of gui possible
# 1	Hence, it is not always tog(n) that f(n) < Cq(n) and 6, q(n) < Cq(n).
	that a g(n) < colors
<u> </u>	-50.00 38 x 088 x 030 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
	Hence, both are wrong.
# x-x-	in Both i condition baking
1.0	As seen from the given C function,
TMS 02	
	the value of p is always log_n for all i
	From 1 to n-1900 2 9 100 1508 2500 to
100 mg	1500 2 fix door 1500 Est vet
	Also, the value of 9 is incremented by:
- M	log (log n) for all i from ton
Marine	
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Hence,
	g is approximately nlog2(log2n).
1 1	
M-11/10/21/2	
M-myshir_m_	
Tomphis	
Taylis_on_	
- Tought _ m_	