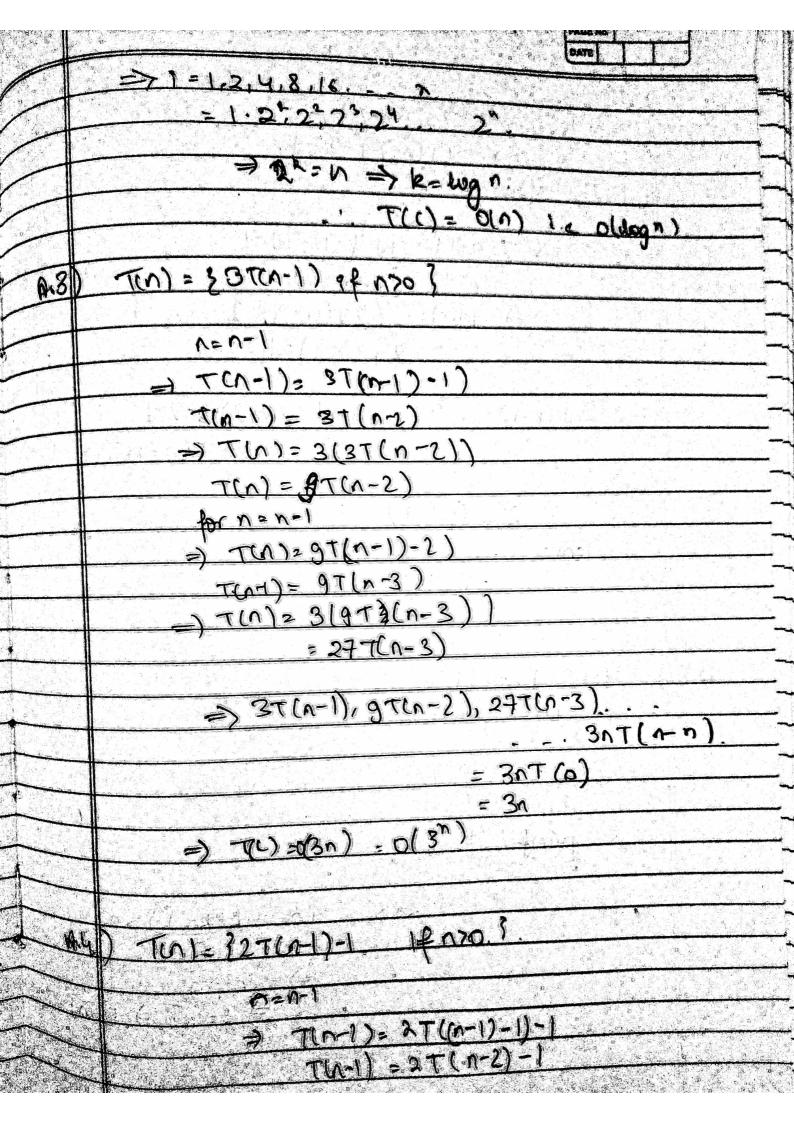
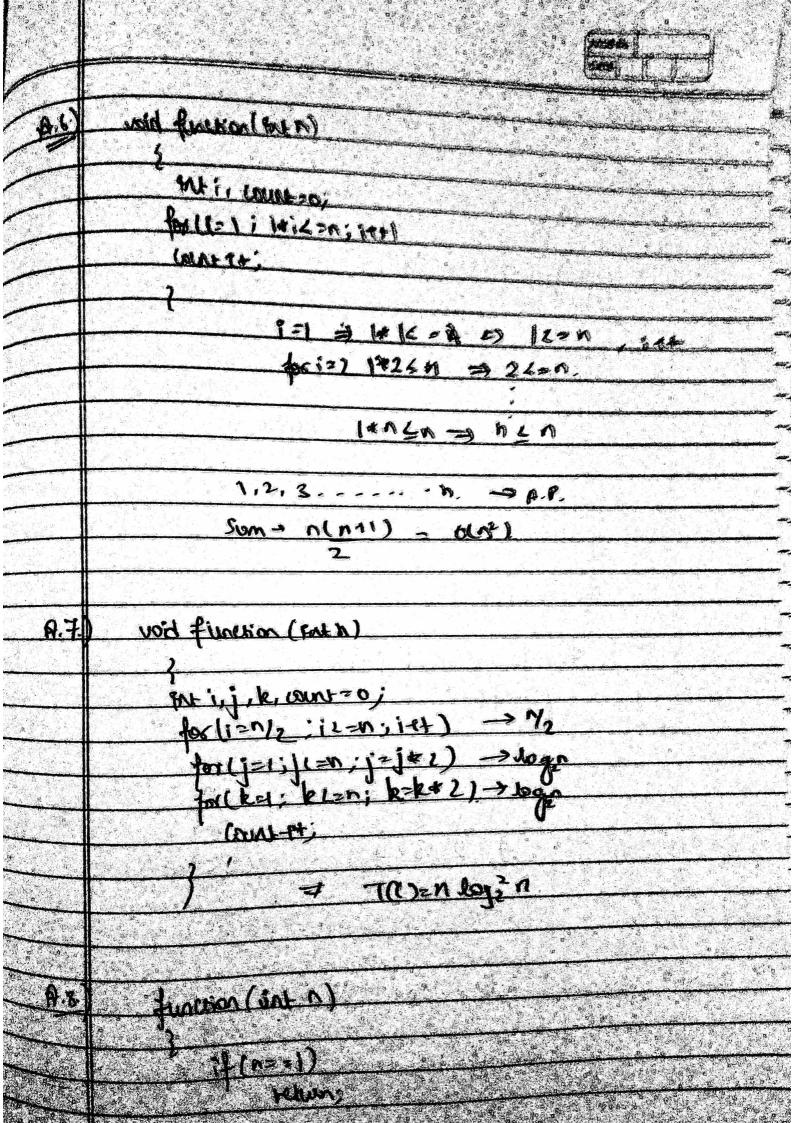
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, p. 10		
	Tutorial 1	بسكد
A) Asymptotic Notations: - It is used to describe the	9
	surreng time of an algorithm - how much time	
1	an alostome takes with a goven enjult. n.	سيب
	There are 3 different notations big 0, big theba(0)	
1	& big omega (D)	
	3) Big D: - It defines an appea bound of an algorithm.	65 47 - 41
	17 courts how many therations an algorithm will	السيد
	alke in the world-rave scenasio, with an enput or	
	ii) Big a -Nobation :- Big (a Omega) notation	
	derceipes port survive the of albeithm	
	for eq :- Bubble soot algorithm	
And the second s	788) O Notation: - Theta natation enclosed from above and	
	pepare H substitute after 8 formes panded - time.	
	compression and the contraining average, three	
		- 10 G
A.2	for (i=1) to n)	
	2	F
	1= 1+2;	
		-
	loop stud up to a terms	
91 - VI	Land Company of the C	L
	talide 4000: 9=1+2 1+ 7=7+2 (10Chout	
	T=2 mue)	
	9= Y 12 Ne values	
# 5.4 30 3	1=8(3°4 val)	
		M



=> T(n)= 2(2T(n-1)-1' 7(n)=47(n-2)-2-1 for n=n-1 => t(n-1)=4+(n-1)-2)-1 T(n-1) = 4T(n-3)-1 $\Rightarrow T(n) = 2(2T(n-3)-1)-2-1$ = 87 (n-3)-4-2-1 2T(n-1)-1, 4T(n-2)-1= 8T(n-3)-4=2=1 · .. 2nT(n-n)-1 $= 2^{n} - (2^{n-1})$ Ton = 1. =1 TK)=0(1) 4.5 gn+1=1, s=1; while (Scan) タットシ 19-2-6 1+2+3...+K=R(k+1)>n 3 b2=n 3 k0 √n 3 o(m)=10



	OATE IT
	for (1=1 ton) -> 0(n)
	4x4=x400 -000
10 T	buent (" " ");
	function (n=3);
	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
	$\Rightarrow \neg \pi() = \delta(n^2).$
<u>A9</u>)	Vost flockion (Rut n)
	for (= 1 to n)
9	
	\$\forall \(\forall \); \(\forall \
	point (" * ");
10 /m	
	123n
,	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
	1 2 3 4 10)
NEW CONTRACTOR OF THE CONTRACT	$T(C) = (N-1)(N) = O(N^{2})$
- Bylo) Honoron-M'k, can.
g ·	- Relation by the book the of Prof. 1911 and
1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	- Relation blue was soon at - m' Proce "h) pay