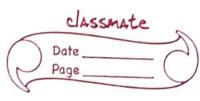
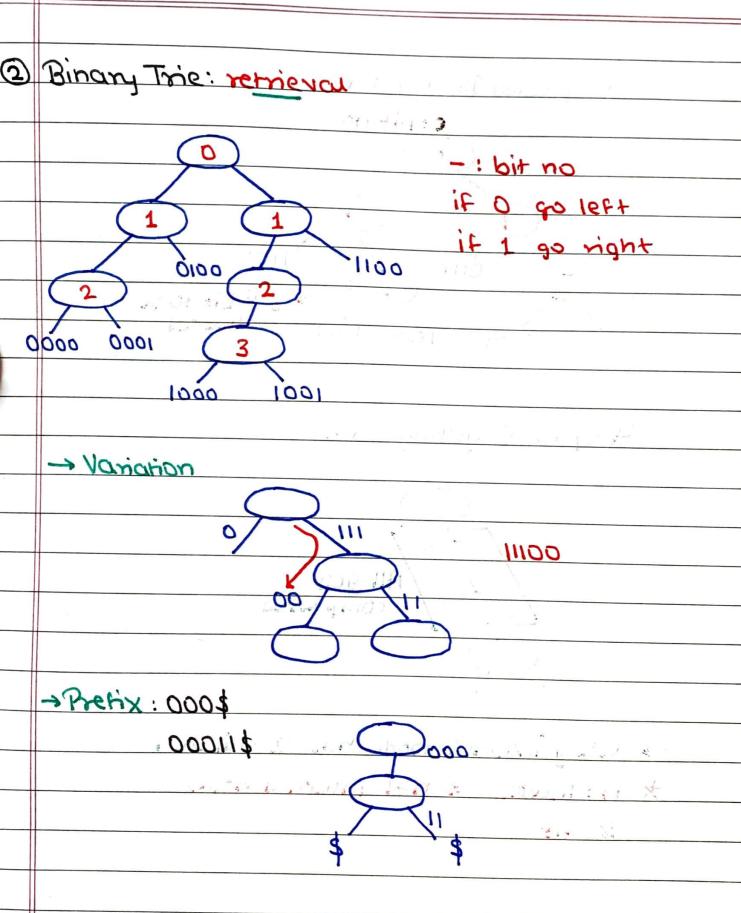
e	reserve (classmate)
7 1 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	Date
	Our Com Milliams
	Louisis HALLION List from stranger
*	Collection of Strings!
\rightarrow	Search : 1 del 0 k
-	Inserte de la marche la contrata (1905) de (1905) de
	Delete (+ 90000 go on 0 (NOC) 9 to 100 990
	Layer to constituent in that was our
ω	Digital Search Tree 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	Level O
Oth bit i	
762	a proper like the look of appropriate the region &
	The accept the son some beautiful in the son to
	where the second second second second second second
-	britt Hij Kuma vacana mana
	(1000) * Insert 0011
	2 40
	(000) (1001)
	40
	(100)
(0000 (001) ×
*	
	Delete Z, x goes to z's place
	leat in a subtree
<i>€</i> ′	Angeles a such a first property of the second of the secon
w 1	and and and a selection of the selection





3 Compressed Binary Tree:

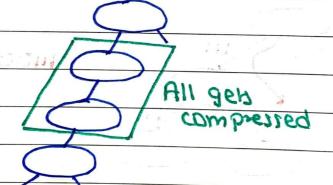
O:Bit no

O:Bit no

1100

2 3rd bit to be checked

* Space is getting saved:



* n: leaves => n-1 internal nodes

4.0.P

*	The:			
	Insert			
	Search Colores & An Color			
,	Delete			
	i i i o'gray' ta			
*	Coiven a Text T & pattern P check whether P			
	occurs in T.			
*	IF PETONO NICIONAL CI HONALE : SOUNDE &			
	then P is a prefix of some suffix of The			
	ord kinor sappa ni harde wihni Hi *			
	T: aababcb (+2 and que -12) a ciz constitutor : 5			
	P: abc 2001 40.00:171			
	Yi Ti = Tend			
	iend			
*	Store suffixes in compressed multiway trie			
	LIND : 1-III + III = abon = con work			



\$ na store[0.6]

6 a bananas) nas

5 na o store [2.3]

* 7 leaves: Stored in lexagraphic order

* Suffix Tree:

* If indices stored in edges radix hee

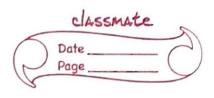
* T: maximum size (of alphabet)

ITI: no. of leaves

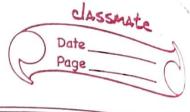
1+ x + x + . . + x n-1

* Novof internal moderniti-ti paiture orale t

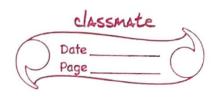
* Total no. of nodes = |T| + |T|-1 = O(171)



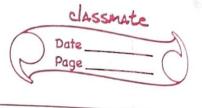
×	Space: OCITITION				
	quentime: OCIPIIOgr) -> Binary search				
	(# sorted array)				
×	Preprocessing Time:				
\rightarrow	each node has an array of size T				
×	Instead store the possible alphabets				
	in a BST For each node				
	Dittated 1 of 1 of 1 min a reason time in 17				
×	4 possible alphabels stored as BST in node VX				
*	Space: O(ITI) (# no. of edges ITI = 1)				
×	Quentime: OCIPI log (no. of worst core branches))				
*	Preprocessing Time: To build suffix tree				
	By building BST 1 11 11/11				
	11 21 1 2 1 1 7 1 1				
	in a regional				
	6 12 12 2 1 1 1 2 1 1 1 2				
2	LINEAR STATE OF THE PROPERTY OF THE STATE OF				



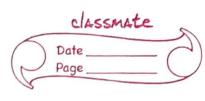
*	Various applications of suffix tree
	P is present or not
0	Find all occurrances of P
	To find na
	na =0 =
	\$ na
	2 4 Store the points.
	Build: OCT) * Store the pointers to leaves of the nod
	Find au occurances: OCIPI+KI time
	* Connect au the leaves by doubly linked list in
	OCITII # no. of leaves
,	- Level Land Harrison Harrison Land 18 1 and 1 special graph of
3	Find au texts T1, T2,, Tk which contain
	Pattern P
	T1\$T2\$T3\$TK#
	Build a suffix bee
	$O(T_1 + T_2 +\cdots+ T_K)$
×	Whenever we encounter & Prine the subsequent
	Dart



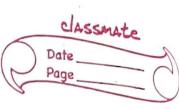
(5)	Longest substring of T				
	that appears at least m >1 times				
	and some of the second				
	* Store no. of children				
	4 length of string as				
	a pair as a savelife				
	7,151 daya of each node				
	2 ml 2 felice 10 de co 202 11				
(S)	Longest common substring of two strings T1, T2				
	T1 \$ T2 # 12 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
	114.21				
	check one smng				
	Liblack From T, 4 other from T2				
1 10	(# T, 4 T2 have diff				
\$ 10.	delimiters)				
	The state of the soll protection				
	stile titel				
	Latina i a Comment				



×	Suffix array			
→	Preprocessing space is upperbounded in			
	Preprocessing time			
	0.1123456			
	bananas			
	alitural as all the said the			
*	To construct sultix array consider inorder			
	traverson of suffix hee.			
	6 5 3 1 0 4 2 -> Space OUTH			
	Lexographical order			
*	Once suffix array is ready destroy suffix hee			
*	Once suffix array is ready destroy suffix hee			
- 6	State of the Manager Sporth			
- 6	State of the Manager Sporth			
5	as We need logITI to binary search anas To compare we need IPI			
5	ana\$ We need logITI to binary search To compare we need IPI Anana\$ Hence to check PET			
5 3 1	as We need logITI to binary search anas To compare we need IPI			
5 3 1 0	We need logITI to binary search ana\$ To compare we need IPI anana\$ Hence to check PET banana\$ O(IPIIOgITI) na\$			
5 3 1 0	Sings We need logITI to binary search ana\$ To compare we need IPI anana\$ Hence to check PET banana\$ O(IPIIOSITI)			
5 3 1 0	We need logITI to binary search ana\$ To compare we need IPI anana\$ Hence to check PET banana\$ O(IPIIOgITI) na\$			



*	LCP array
-	Longest common prefix
	Common prefix of length 3
suffix.	6 5 3 100 140920 000 : (00091) *
	0 1 3 0 0 2 : LCP array
	Preprocessing time: O(ITI2)
	L
	D - go to M to R (# lexographic) else L to M
ΙτυΟ	F IIIIT
	M ¹ K B
	R $LCP(P,M) = K$
	if K=1P1 then P is found
	IF K < IPI
ρ	
M	LCP(M,M') = k'
- NAI	Tf K' > K
M	(K+11th chrc of M'4P donot match
	If K'=K
P	KHI - Compare Brom KHI
M,	
IM	Hence: OCIPI+logITI)
	· ·



×	LCP(1,8)	111111111111111111111111111111111111111	
^	1000	121000 9	
-	LCP(3,4) LCP(5,8)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	11/
LCPC	1,2) LCP(7,8)		
	(C3/0) (1) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	mma)	
	1 2 3 4 5 6 7 8		
*	LCP(a,b)= min (LCP(a,c), LCP(c	17) CE	[0,6]
\star		OCIOSTI	
	# Seg Tree (1100: mi)	28 1	1 7
		10	/
13 ye -	PANE # 2 H 21 12 04 00 4 0	. 1	
	51111		l l
			11110
	i si	11/1	£ 4
	N = (14.9.14.1)		
	Devent of Y and Attend		
		19123	
			1 1
	1 1 1 1 1 1 1 1 1 1	4	
	× 1 11		
	r The transfer as		
		and I	k., .
		of out	1
	the state of the s	7	