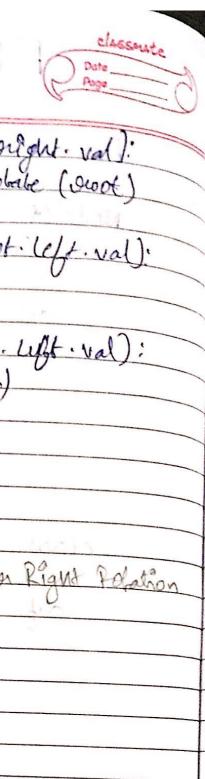
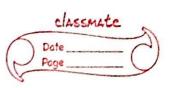
ADS Lab -4



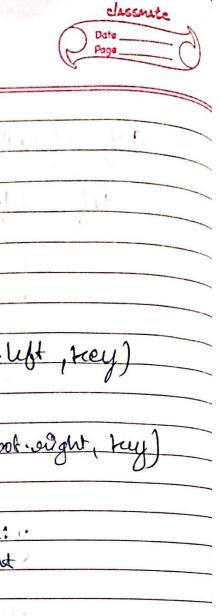
ALL > trus Inscertion & Delution
1 to a single site of the same
MODICOR
class TourNote (object):
The state of the s
def Init_ (self, key):
The state of the s
sell. hey=key
Self. key = key self. left = 1000 None self. origint = None self. neight = 1
seth origin = None
sellinegant = 1
class AVL (object): -) AVL Inec Class
dy inset node (self, snoot, trey) -> Inset Milrod
Mutual
if not acock:
outurn Tom Noch (key)
elih key < propt. val:
eroot. left = self. most (swoot. lift, key)
else: ovoot.oright = Self: insert (voot-tebt, key)
ovot.oright = self. insert (ovool-tebit, key)
care thought for
moot. height = 1+ man (self. get Height (moot. 14/5),
or the second
sey, getreight (avol . right)
balance = get balance (wort)
A ROBERTON
if (balance >1 and key > eroot. lift. val):
2006. Upt = self. Lift Robate (swar, left)
sulvain setfles dift Potate (boot)
V



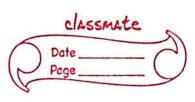
occol-sight = self wight police (ocot) if (balance >1 and key c ovot. left. val). if (balance < - 1 and key > recoot. Lift val): confuem recop dy englit Rotate (self. 2): -> Four Right Rotation y = 0100k. eight 72 = y. W. y.lyt = 2 snoot 2000t vight = T2 2. helgent = 1+ man(gettletgent (2.4/6))
get Height (2006. wigns) y. neight = 1 + man (getheight (y. uight),
get height (y. uight)) couleum y



=	
	Defight Botale [self Finet):
	dy lytrotate (self, z): -> From Left Adation
	0 00, 000
	y= 2. sught
	$y = 2$ eright $T_2 = y$ elyt
	4. left = 2
	y.lift = 3 2.right = T2
	2. neigni = 1 + man (se get Height (2. Wh), get theight (2. wight))
	gettlelight (2. ulght)
_	
_	y. height = 1 + man (getteight (y.l.yt), getheight (y.sight))
_	getneight (y.sugut)
	couluna y
	V ,
_	dy get Height (sey, owoof): -> Returns the
_	if not apoli: Height
-	Jurum D
	outueur ourof-height
	ATO ALL AND THE SELL SELL AND DELIGNA RALINA
_	det dy get Ralance (Self, swood):-) Returns Balance Factor
_	O if not anot: Factour
_	
-	outrom self. get Height (swot-left) - self-get Height (swot-stight)
	- sufficiency (Guot-organ)



de def delite (sey, snoot, key): if not anot: rey > oroot. val: ney > sook val: e = gelBalance



		Proge
ib bo	alance >1 and get Balance (Hum vight Robabe (2000t)	oroof.1691) >= 0:
	Hum eight Roberte (croot)	
If bal	ance > 1 and getBalance 1.9	root. Ult 1 4 0 '
0 094	ance > 1 and get Balance (o cot: lift = lift Robate (conot: l outnour right Potate (cono	ut)
	outron right Potate (coso	6)
7		
if ba	lance 2-1 and get Balance pot. vight = origint Rotate Uleveur left Potate (and	(proot. vight)>0:
91	pot. vight = oright Rotale	[Josef . vight]
ou	elever left Potate Courd)
Ollhom	r roof.	
		,
and the second s		