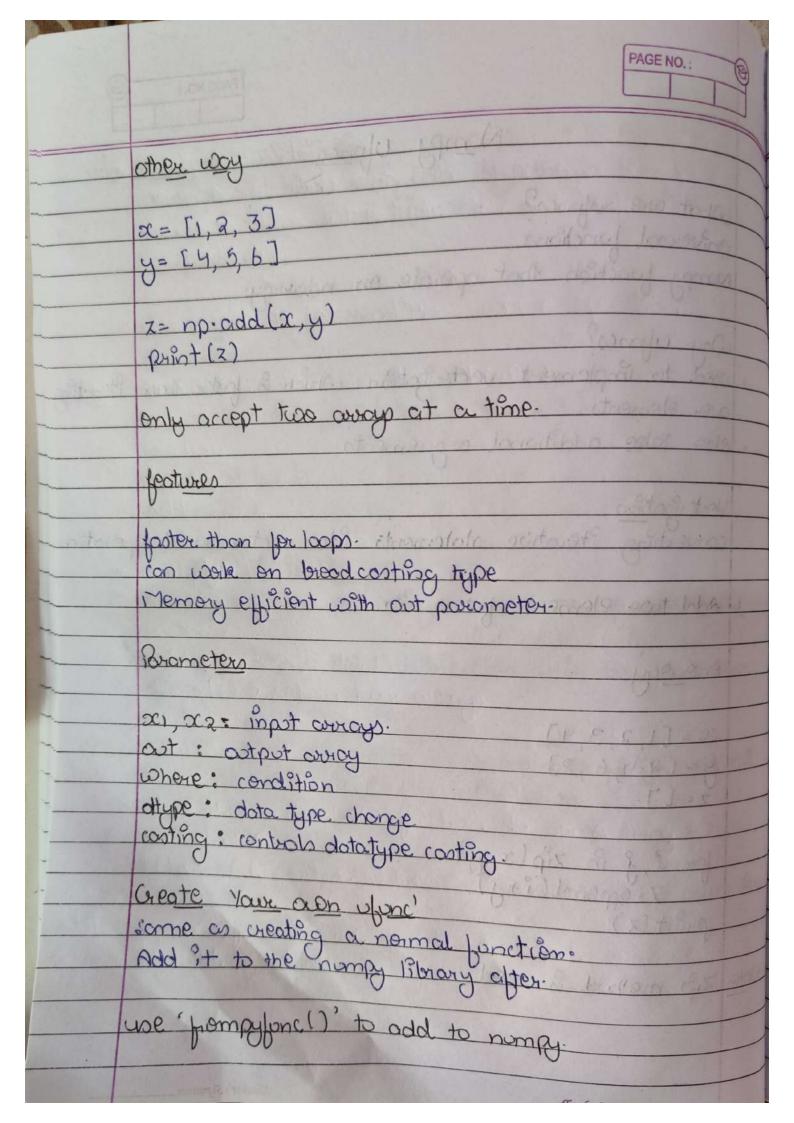
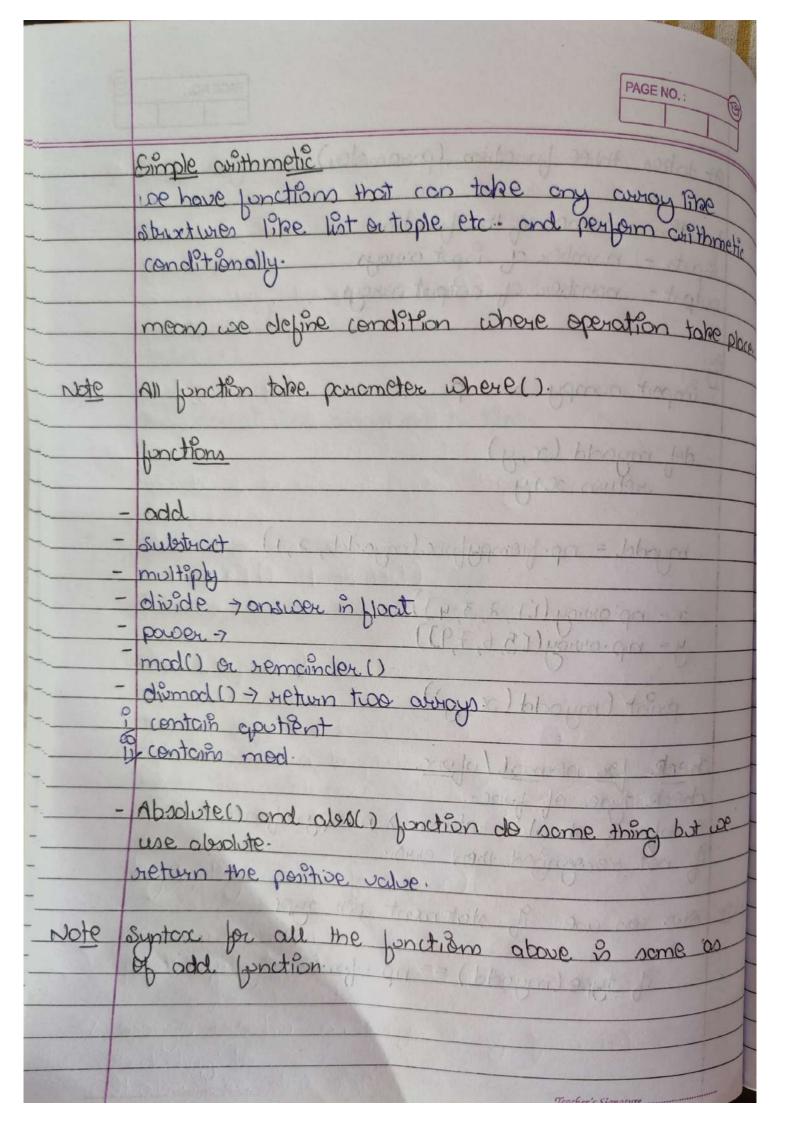
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1 10		

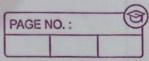
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	PAGE NO.:
	Nompy uponcs
	What are upncs?
_	What are uponco? Diniversal functions
	rampy function that operate on induring.
	any upones?
•	used to implement vectorization which is foster than iterating over elements.
	Also take additional arguements.
	The second to th
	Vectorization
	converting iterative statements into vector based operation
1	Add two element of two lists
	oneway
	x = [1, 2, 3, 4]
	y=[9,4,6,8]
	7=[]
	10. 9 9 9 -9 ( )
	for i, j in zip(x, y): z. append(i+j)
	Print(Z)
bto	79 0
The state of the s	Zip method is used
-	ignatal blood (b. lancing)
_	



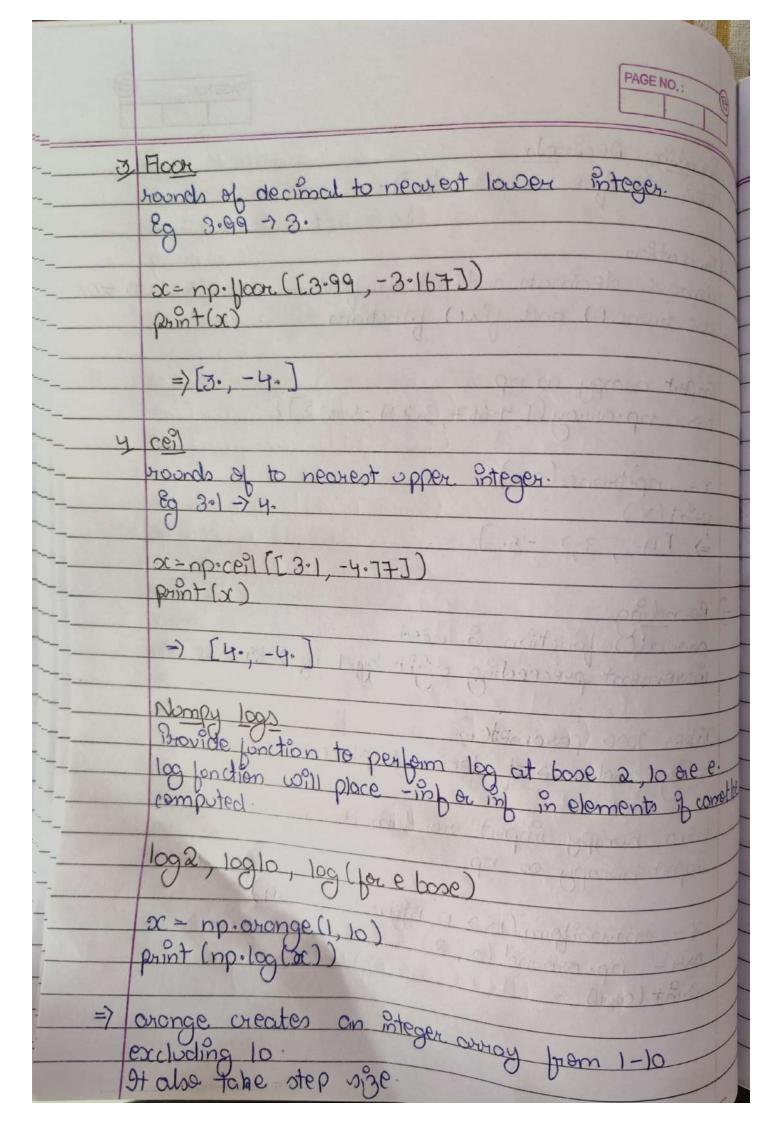
	PAGE NO.:
	Ot takes three function (parameter)
	The part of the state of the second of the s
	function - name of the function
	inputs - number of input average.
	output - nomber of output oranges.
	mot nottorago sorto contriburas organia se o sorre
	import numpy as imp
	import numpy as inp
	def myadd (x,y) return xty
	return octy
	liko -
	myadd = np. frompyfunc (myadd, 2,1)
	Hatter -
	y= np. auray ([5, 6, 7,9])
	y= np. arricy (15, 6, 7,9)
	221 ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (
	print (myodd(x,y))
	Chook to a the
	check for normal / ulunc
	a de la fonc.
	check for normal/utunc.  check type of func.  A utunc should return -> numpy utunc.  Pl not recognized then cura.
	b not recognized then cura.
200	
0	Also con use of statement with type
	if type (myodd) == np.uponc:
	Teacher's Signature





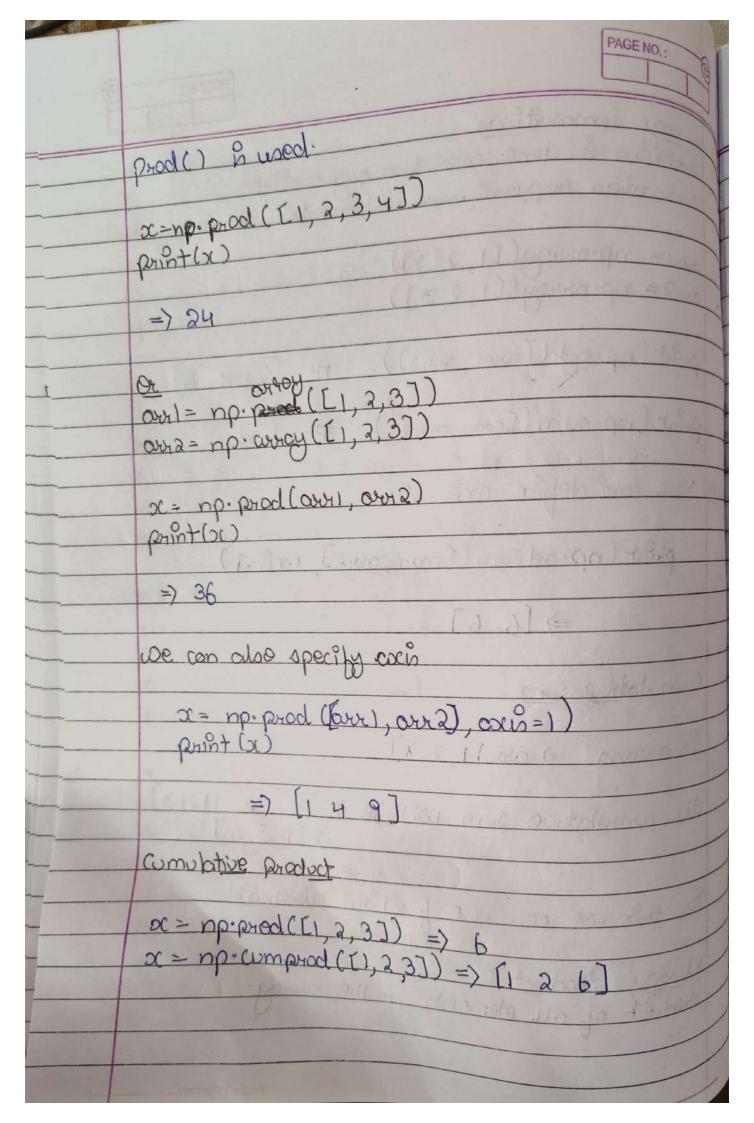
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	Roadin Decimals
	Their are five ways to do it:-
	may are five and
-1	Truncation
	Romano decimals and return Hoat number closest to zero.
	Remove decimals and return float number closest to zero.
	ase dicrice of the first
	import numpy on np.
	import numpy as np. over= np.ovvoy ([4.667, 3.231,-5.012])
	Con Part H
	x = np. tronc (aux)
	(sc) tring
	=> [4., 3.) -5.]
	(ETTP-187) Paran-10
-3	Aounding
	around. Proction & used.
	increment preceeding digit by 1 il >=5
	. 0000
	Takes too parameters.
	array and no of decimal places.
	of diagnola is file so letter and they washing sol
	from numpy import random as rim
	import numpy on np.
	(Sand 9 sell pool sales Basil
	3(= 0, m. uniform (100=0, high=5, size=4)
-	our = np. around (x, 2)
	print (au)
	del and years rogots to other operate to

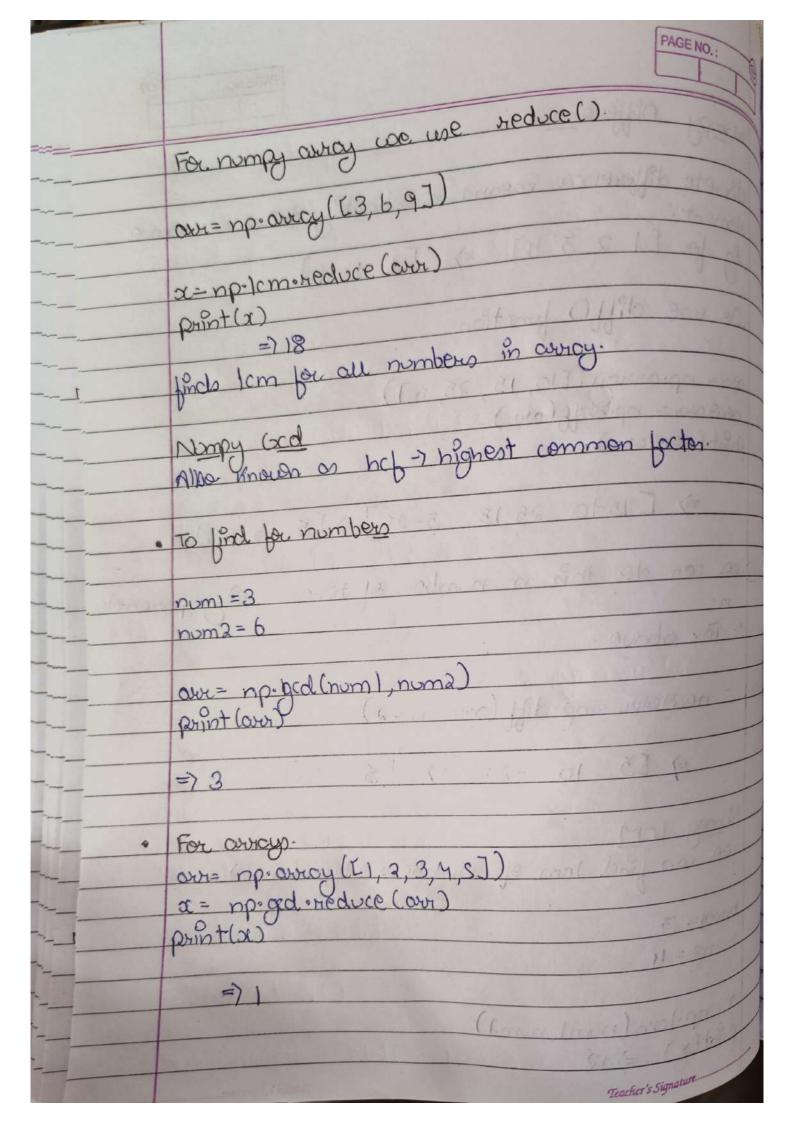


	PAGE NO.:
	Numpy Summations addition in done over two orguements summation hoppens over n elements.
	addition in done over two orguements
	summation hoppens over n elements.
_	$au_1 = np \cdot au_2([1, 2, 3])$ $au_2 = np \cdot au_2([1, 2, 3])$
	aria = np. array ([1, 2, 3])
	print (np. add (avr, avra)) # [2 4 6]
	Print (np. sum ([avr), avr2]) # [12]
*	Tomor Crip Sorri (Loon), words of the Class
Note	You can define com also
	" 0° - [ 0° - 1] - 0° 1 ] - 0°
36	e. print (np. ad sum ([aux1, aux2], cach=1)
	⇒[66]
	Sins without only cor son
	Comulative sum
	(18 100 (see 1 see bogger = n)
	it means =) aux[1,2,3]
	Ata completion and solver a [1]
	Its complative som will be => [1 1+2, 1+2+3]
	=>[136]
	For this we con use function 'comsum'.
	Numay Product ( (186
	Product of all elements in the away.
	U TITO WOTEG

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A E	PAGE NO.:
	Nampy Difference
	discrete difference means substracting two successive
	Eg for [123'4] => [111]
	We use d'éff() function.
	aur= np. aurcy ([10, 15, 25, 5])
	Print (newary)
	=> [15-10 25-15 5-25] => [5 10-20]
Note	use con do this is number of times using parameter
	For above.
	newsour = np.diff (over, n = 2)
	=) [5 10 -20] => [5 -30]
	Nempy LCM of numbers by LCM().
	(Rea) mention have - c
	$nom_2 = 4$
	a= np.lcm (num1, numa)
	Print (x) =) 12  Teacher's Signature



	PAGE NO.:
	Wmpy Trignometric function
	Numpy provide infoncs sin(), (e)(), ton() These take values in radians
	There take colors in Acquary
	over= np-away ([np-pil2, np-pil3])
	$gc = np \cdot sin(our)$ $print(s)$
	=>(1.0,0.866)
	Convert deg to rodion
	(c) tale
	40d = Pi x deg
•	184 = 20. 2420 (192 46 3627)
	print(x)
	begins Days across out 19 waster occord dell of
<u>946</u>	We con find angles from sin, cos, ton volves.
	These produce radion when
	print(x) (400)
	71.570
	hypot() -> takes base and perpendicular to colculate
-	give annever in float.
	give or viewer. In place

