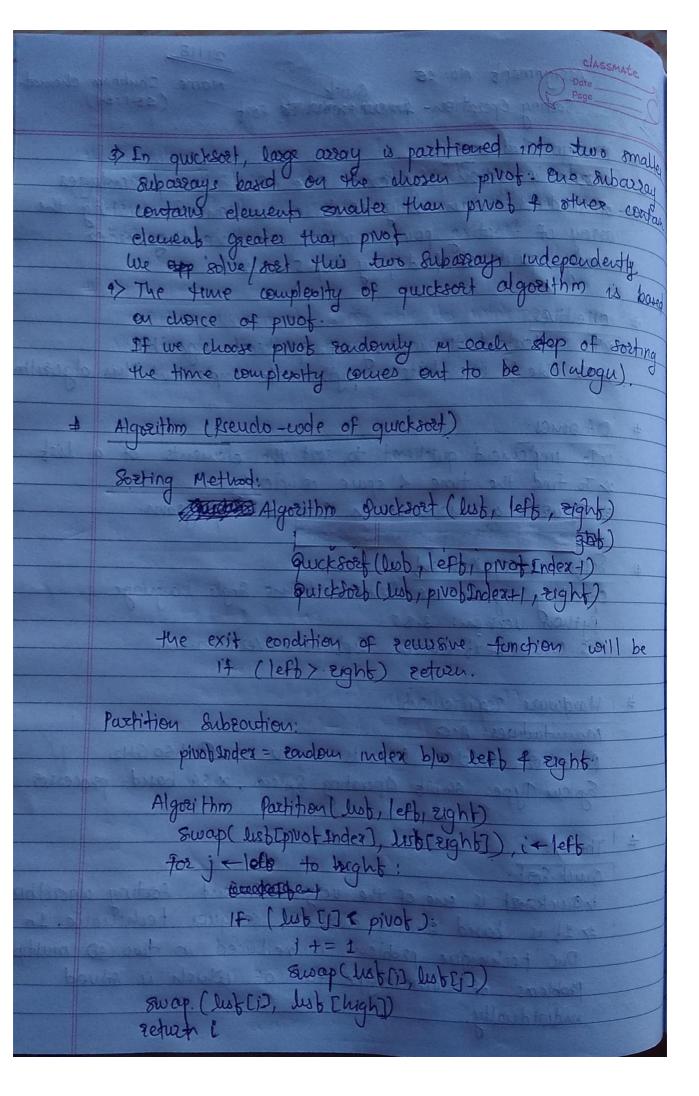
Sorting Operation- Insurance stated sort (SE-1:E-1) Assignment No: 05 # Boblem Statement: write a python program to store first year percentages of students in an array. Write a function for sorting the array of floating point numbers in ascending order wong quick-sort of duplay top-5 scores # Objectives: To understand the working of quicksort algorithm

To able to use lists in python to implement this algorithm # Outcomes: 17To implement quicksort to sort the elements of a list. 2> To find the time 4 space complexity, 3) To write a money devien & modular program. # Soffware requirement: operating system windows to home single language Pythout version: 3-8.5 Vs code (text-editor): Sept. e020 Version. Hardware requirement: Manufactures: Acer PROCESSOR: Intel(P) CORD. 15-8265U CPO @ 1.60 GHZ System Type: 64-bit Operating System, x-64 based processor. # Theory: quick-sort: is guicksout is one of the very efficient touting algorithm. It is based on the divide & conquer technique. In Duc technique problem is reduced in two @ multiple Problems of same type each of which is solved industrially



ADT OF class :

class scoresheet

det consputor ():

1/ Inditialize the list & store count

N=0

det quicksorter:

11 logic of quicksort algorithm

# Time & Space complexity Analysis:

be implemented in constant space. The required for squired for the aug is over the choice of pivot in each smaller subproblem.

Test cases:

	Test cast No.	Testican Percription	Expected o/p		Actual 0/p	
	1.	lub=d90.22, 85.23,	earle.	marks	Park	marke
		96.28,53.55,82.91,	-017	96.28	1	96.28
		93.26	2	93.28	2	93.26
		· luf with no.	3	90.22	3	90.22
	-	duplicates.	9	85.23	9	85.23
			5	82.37	5	82.34
1	2.	Jub with deplicates	gank.	marks	eart	marks
		lub = 1 30.21, 88.36, 90.21,		93.83	1	93.83
1		9213, 88.26, 93.83	2.	92.53	2	92.03
		3 3 3	3	90.2)	3	90.2)
			4.	88.56	4	88.56
1			1	ALCOHOLD BY		

